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Back Cover: 1994 LTG Ellis D. Parker Award Winners;
Front Cover by CW3 R.G. Swihart, Multi Media Branch, Fort Rucker, Ala.

Cover: This issue depicts the increasing importance of Army National Guard Aviation to the Total Force as we move to the 21st century. ARNG Aviation—ready and able to respond to national and international crises across the operational continuum.
Total Force...Total Victory!

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Major General Ronald E. Adams

Army National Guard Aviation

Total Force . . .Total Victory!

This issue of **Aviation Digest** will focus on Army National Guard (ARNG) aviation force modernization, and the versatility it brings to the total force. As you read the ARNG articles in this issue—you will realize the many challenges that lie ahead. Guard aviation undoubtedly will be an important, integral part of Force XXI.

Despite a very demanding year, ARNG aviation has achieved a number of significant accomplishments. A soldier from the Eastern Army Aviation Training Site (EAATS) received the AAAA trainer of the year; an EAATS unit was selected as runner–up for the prestigious Lieutenant General (LTG) Ellis D. Parker Award; and an ARNG aviation team captured second place at the World Helicopter Championship in Moscow—to name but a few. Another noteworthy accomplishment is the safety record of ARNG aviation—this March will close 24 consecutive months without a Class A accident. Great work!

In conjunction with USAR aviation force migration, force modernization, and Aviation Restructure Initiative (ARI), Guard units will be cross–leveled across the United States to effectively balance the force. This must be accomplished while maintaining mission readiness for both federal and state contingencies. ARNG aviation must remain totally integrated with the Active Component (AC). Over the past year, ARNG aviation has been alongside its AC partner contributing to the efforts in Honduras, Panama, Somalia, and Haiti.

In addition, it has provided critical disaster–relief support and counterdrug operations in the continental United States (CONUS).

Army Guard aviation forces are on the leading edge of change and add another dimension to the versatility and relevance that Army aviation brings to full–dimensional operations. The following articles serve to highlight that—***Total Force . . . Total Victory***!

Changing of the Guard

MG John R. D'Araujo Jr.
Director, Army National Guard
Pentagon
Washington, D.C.

The Army National Guard (ARNG) has begun the difficult task of restructuring to meet the challenge of a changing world as a full partner in the Total Army. Some of the events accomplished in the past year include designating the 15 enhanced brigades called for in the Bottom Up Review, integrating U.S. Army Reserve (USAR) Special Forces units into the ARNG as announced in the Reserve Component Offsite Agreement, and announcing the planned fiscal year 1995 inactivations. As we have continued the process of downsizing the force, we have continued to meet our many federal and state missions. The ARNG, spearheaded by the 29th Infantry Division, Fort Stewart, Ga., is providing the lion's share of soldiers to a pilot program composite battalion, which will perform peacekeeping duties in the Sinai. The ARNG also responded to many other missions across the country while continuing to conduct overseas deployments for training around the world.

ARNG aviation is shouldering its share of the restructuring to meet this changing world with the implementation of the Aviation Restructure Initiative. The ARNG will continue to modernize its aviation assets, removing older airframes from the fleet while absorbing aviation force structure from the

USAR. Even with the migration of USAR aviation, the Guard will lose 40 percent of the fleet and have about 1,800 airframes in the year 2001.

Aviation continues to provide invaluable support during disasters. Flying medical evacuations, aerial surveys, resupply, and search–and–rescue missions, our aviators have continuously demonstrated their professionalism and vital importance in disaster responses such as floods in the Midwest and Georgia, hurricanes in Florida and Hawaii, and earthquakes in California. Aviation also provides important support to law enforcement's continuing efforts to interdict and eradicate drugs. We are committed to ensuring that each state maintains the assets necessary to accomplish state missions.

Although we will have a smaller aviation force, we will be a highly trained force. The Eastern and Western ARNG Aviation Training Sites continue to provide innovative training opportunities for both our officers and enlisted aviation personnel to include aerial gunnery and simulation training for aviators and skills training for our maintenance personnel. Units are conducting overseas deployment training in places such as Germany and Central America. Participation in exercises, such as Atlantic Resolve '94 and Operation ARCADE FUSION, provides our leaders with excellent opportunities to sharpen their planning skills. Real–world missions—such as preparing the aircraft of the 10th Mountain Division, Fort Drum, N.Y., for deployment to and from Somalia—serve as valuable training while demonstrating our readiness and importance to the Total Army effort.

The importance of the ARNG to the Total Force will increase as the force continues to downsize. Integrating ARNG aviation into warfighting has never been more important to the future of Army aviation.

The Army National Guard aviation force is on course and glide path as we prepare to enter the twenty–first century.

View from the Top: Army National Guard Aviation

COL Joseph L. Ferreira
Director, Army Aviation and Safety
Army National Guard Readiness Center
Arlington, Virginia

In slightly less than five years, clocks will tick down and America, with its Army, will enter the twenty–first century. Unless world events dictate otherwise, that Army will be smaller, highly mobile, and much more lethal than today's Army. We have already begun to see differences in the way our forces are used, and we must be prepared—not only for large–scale theater conflicts but also for intervention in small local arenas where the United States has an obligation to intervene or assist. We know this because the change to meet these challenges has begun. For Army National Guard (ARNG) aviation, it means meeting this challenge by breaking paradigms and viewing our role in a new light.

Change is not new to us. We implemented the aviation force structure changes of the 1970s and 1980s with little fanfare and fuss. These were times of expansion for ARNG aviation—from the absorption of the Army's post–Vietnam aviation drawdown to the expanding budgets of the 1980s and the ARNG's increased role in domestic activities. With its vast aviation infrastructure, the ARNG was always able to add a little more here and a little more there. Our mind–set of 20 years was to grow, take a breath, and grow some more.

The challenge to National Guard aviation with the current change is brand–new: stop the growth—and go on a diet. We have accomplished the first part of this relatively easily. After all, our plate was pretty full. We are now beginning the difficult phase: reducing the number of our airframes, closing facilities, greatly reducing budgets, and most painful of all, drawing down our fine aviation soldier pool. This challenge can be best illustrated by looking at two sets of numbers. Currently, we operate 2,500 aircraft; in the year 2001, we will have only 1,725. We now use the services of 28,258 ARNG men and women in support of our aviation mission; in 2001, we will have reduced that number to 24,690. These numbers have an even greater impact when one takes into account that the end–state numbers include a significant portion of U.S. Army Reserve aviation migrating to the ARNG under the tenets of the offsite agreement.

Planners in ARNG aviation must be especially careful as we go about this reduction. It is all too easy to throw the baby out with the bathwater. In this case, the baby is the ARNG's dual mission of providing manpower and equipment to meet the needs of the states in times of

(Continued on page 33)

Are aeroscouts still part of Army aviation?

After attending the Aviation Trainers Conference (24–28 October 1994) at Fort Rucker, Ala., I came away with a feeling that the Army— and Army aviation leaders in particular—have concluded that the only aircraft left in the system is the AH–64 Apache. Along with this conclusion is the decision that the only aviators worth mention are the ones who manipulate the controls of the Apache. While all other aircraft are deemed unworthy by our leaders, I am most upset by the attitude taken by those in charge against the aeroscout.

I have served most of my career as an aeroscout and a utility pilot. I flew the OH–6 Cayuse in Vietnam and have recently finished a tour as the OH–58 Kiowa standardization instructor pilot of an aviation brigade (attack) in Europe. Before that, I instructed at Fort Rucker in the aeroscout program, which produces all of the aeroscouts in the Army today and prepares many for continued training in the AH–64.

Most of the pilots I have taught at Fort Rucker and those I have known or flown with in other assignments are as good or better than all of the other pilots who have flown for the Army. AH–64 pilots are experts at what they do, but let me further say to all our leaders, the OH–58 aeroscouts in your unit are just as professional. Whether you use them as doctrine dictates or, as I heard at the conference, ". . . just use them as decoys . . . , " they sustain the same sense of readiness and mission accomplishment.

Don't assume that the aeroscout is somehow a less–trained aviator just because Army aviation has failed to ensure that technology enhancements were integrated into reconnaissance aircraft. Providing "safety–only" improvements for the OH–58 does not degrade aeroscout mission performance or professional attributes. I contend that you will get a better picture of the aeroscout if you remember that, despite the old and underpowered aircraft that the Army has given him, he continues to do the mission to the best of that aircraft's ability.

CW4 John H. Converse
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Feedback—"Are we soldiers first . . ."

I must voice my concerns about a letter written by CSM Brent H. Cottrell, "Are we soldiers first—or not?" (in the September/October issue of the ***Aviation Digest***). Many good points were noted in the sergeant major's letter, but as I came across the solutions, I sensed an increased dosage of nonaviation–related tasks and details—consuming on–aircraft maintenance time. As aviation crew chiefs, mechanics, and maintainers, these soldiers hastily fulfill both requirements. The overall cost to Army aviation is excessive workload, poor productivity, and poor quality of maintenance performed. My most vivid memories after a full day of "weekly mandatory training" are closing the hangar doors, turning on the lights, and getting ready for the long haul.

I feel that solution number three, in part of course, has potential. Let us look at an organization, such as the Air Force, with service members working and advancing by grade within their job specialty. These airmen maintain a high level of technical expertise with minimal distractions. That, in my opinion, is the path we need to take to maintain these multimillion–dollar, highly technical aircraft. As Army soldiers, we must retain our knowledge of basic combat skill but leave the rest to our highly trained brothers in combat arms. These views by our senior leadership to perform like infantry soldiers—rather than as highly trained mechanics performing our wartime mission—will bury concepts such as Stripes on the Flight Line. Also, I must add—in closing—wearing my one–piece flight suit and displaying my Master Crewmember Wings have been a source of pride and distinction—while I have kept my hands out of my pockets and have been very rarely in need of a haircut.

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Wings for air traffic controllers?

As an air traffic controller for the U.S. Army for about 12 years, I have always felt that we (air traffic controllers) have considered ourselves as a strong and active part of U.S. Army aviation.

When I was first assigned to Fort Hood, Tex., with an air traffic control battalion, we were issued a patch to wear on the left breast pocket of our utility uniforms and BDUs (battle dress uniforms). Later it was determined that this was an unauthorized patch, and we were ordered to remove them from our uniforms. Quite a few controllers were a bit upset by this because the patch gave us a sense of pride in the job.

Why are air traffic controllers—who directly affect the safe flight of aircraft— not wearing wings? I understand that, at one time, air traffic controllers wore wings much like the ones worn by the U.S. Air Force. Would it be possible for the Aviation Branch to develop a process to determine what would justify the issuance of air traffic control wings and how and when they would be issued to qualified controllers? Many controllers are proud to be part of the Aviation Branch; it would feel better to look the part as well.

SSG Eddie R. West
HHB P&S Battalion
Fort Sill, OK 73503

The safety officer—a combat multiplier

During the last few years, I have been assigned or associated with units that were called upon to support one contingency mission or another in different parts of the world. Currently, I am in Haiti supporting Operation Uphold Democracy. It does not make a difference when or where we go—nor for that matter, which unit is deployed. We kiss our loved ones good–bye, pat the dog on the head, and off we go again! These deployments have been, for the most part, come–as–you–are affairs. There never seems to be enough time to train up or to correct deficiencies that, for one reason or another, have been put on the back burner—little time and lots of procrastination. This is where I see major problems with our safety programs. A downsizing of the Army and budgetary constraints mean that aviation units will have less operating funds to do actual field training. We are setting up both our safety officers and their commanders for a big fall.

Safety officers advise and assist the commander. Fair enough—but what do they advise and assist on? Lately, it sure has not been on field operations! For a safety officer to advise the commander, the safety officer needs something more than attendance at the safety course as basis for this advice. The excellent education given at the safety course provides safety officers with the field skills to administer a tactical safety program; however, actual field experience on a recurring basis is—and always will be—the best trainer. Unfortunately, at least for the foreseeable future, the handwriting is on the wall as far as field training is concerned. So what is the answer—make the safety course longer to fill in the void? This is unrealistic and should not even be considered. I honestly do not think that is the solution—nor should it be. Remember that the force drawdown and lack of revenue are driving the train.

Procrastination is the thief of time, as the adage goes. Trying to figure out your tactical field aircraft parking plan without having done one before can be a challenge. The commander wants a recommendation now—not an "I'll have to check the books first, sir." Better yet, have a proposed plan ready that takes everything into consideration. You can have as much information about the area as the next guy if you plan far enough ahead. The commander does not pay his safety officer to sit around and tell him why he cannot do a certain thing. The commander wants recommendations, and in a combat or contingency operation, he needs them fast. Make yourself part of the team. In many cases, the staff, at first, will not understand why you need to be in on all the staff meetings and staff updates. When they see that you have something to add and a vested interest, however, you will be considered an asset. Then you are in the position to show the commander that you are there to work with him—not just for him; there is a big difference.

This approach allows the safety officer to be a well–versed individual on all matters that could affect the safety or health and welfare of the command. It all depends on you. Pull yourself away from the desk, and get out of the office. Those pristine safety files, all ready for inspection, and that impeccably numbered reference library are not going to do your command much good when you deploy. Chances are, you will not get to take them with you anyway.

Your unit does not have to go the field for you to educate yourself. Most installations around the world have more than one aviation unit assigned to them, and chances are, someone is going to spend some time in the field. Plan to get with that unit's safety officer and spend some time in the field. You can learn something. Find out who the subject matter experts are in all areas. "Pick their brain" on potential safety–related problems that they

have experienced in the past, and have them show you what works and what does not. When was the last time you ventured into the motor pool—other than to inspect it? Get the master driver to qualify you on unit equipment. If you cannot qualify, at least get a very thorough orientation. Your knowledge will be beneficial when those accident reports start surfacing. You can identify trends. Better yet, you will be able to see, firsthand, where problems can be found. The local food service technician can show you how to establish a safe working environment in the field kitchen arena, and the infantry can show you the proper construction method for hasty fighting positions. Take into consideration the III/V platoon. You can learn some tricks of the trade. What is the tactical requirement for separating fuel from ammunition? How high should the berms be in front of your armed aircraft? Where do CH–47s get placed in a multiple–use FARP (forward arming and refueling point)? And then there's the all–time showstopper: different–colored fuel. How far can aircraft be parked legally away from the active at an international airport and still allow commercial traffic? These are just a few, but as you can see, all are relevant questions. A safety officer needs to provide the command an answer on these issues. Should you have them all committed to memory? Not necessarily, but a good working knowledge helps. In all my years as a safety officer, I have never found anyone who was not willing to share his or her expertise. People are always genuinely enthusiastic and impressed that an outsider is interested in their area.

Where does the safety officer come in as a combat multiplier? Whenever a timely correction is made and an unsafe act is prevented, it adds to the command's ability to project itself on the battlefield. Every accident involving personnel or equipment takes these assets away from the commander, and someone else or some other piece of equipment has to fill the void. If the void is not filled, then we leave ourselves unprotected and vulnerable to the enemy. When you thoroughly educate yourself as a safety officer and your unit has a fully functional safety program, then you, the safety officer, truly become a combat multiplier.

CW5 Gerald D. Cartier
10th Aviation Brigade
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Fort Drum, NY 13602

Army aviation can participate in Naval maritime operations

The revision of traditional Army aviation missions—to include maritime operations and the deployment of aviation forces worldwide—has led to an increased desire for over–water and shipboard operations. Shipboard operations require an immense amount of joint participation to plan and conduct field deck landings, dunker/HEEDS (Helicopter Emergency Egress Device System) training, initial ship deck landing qualification (DLQ), and currency bounces.

Processing requests for deck services is made difficult if the requests are not properly submitted. After forwarding annual shipboard training forecasts to the respective corps headquarters, units then develop specific training requests according to long–term training plans. Units must request primary and alternate training dates with enough flexibility to allow for a ship's normal training. The Navy does not dedicate a ship exclusively to DLQs—the larger the service window, the easier it is to match ship with flight unit. Requests should be submitted in time for inclusion in the fleet commanders' quarterly employment scheduling conference. Units must plan and request services two quarters in advance.

Properly submitting the DLQ request ensures the most flexible handling of the service and increases the probability of actually obtaining a ship—in spite of mission changes within the Navy. Submissions that arrive after the scheduling conference are handled on a "not–to–interfere" basis—a fill–or–kill scheme—or they are titled EMERGENT if the training is necessary to meet imminent deployment or contingency operations. Filling emergent requests forces mission changes in Navy ship schedules that are sometimes felt for several months.

Army aviation participation in JTF–6 missions, contingency plans, and deployment exercises is expanding the need for shipboard training. Proper staffing will assist in ensuring that the training takes place.

For more information, call MAJ Michael J. Knippel, Joint Warfare Officer, Naval Surface Force, U.S. Atlantic Fleet, Norfolk, Va., DSN 564–8623/8633.

Submission/Conference Schedule

Desired Training Window	Scheduling Conference	Input Due
1st Quarter FY96	12–14 July 1995	19 May 1995
2nd Quarter FY96	04–06 October 1995	19 August 1995

Boots may pose danger in fire

The "Improve Military Aircraft Safety" article under the "News and Views" section of your November/December 1994 issue of ***Aviation Digest*** stopped short of one more item of personal attire that is fatally important in a military aircraft crash—boots!

In 1973, I assisted removing a slightly injured soldier from a helicopter crash. Fuel from the aircraft had splashed the soldier, and his clothing was burning. The fire was easily put out by putting the soldier on the ground and smothering the fire. The soldier was left on the ground while an effort was made to get other injured soldiers out of the burning helicopter. In just a minute, the clothing of the soldier on the ground was burning again. The clothing was extinguished a second time, and the soldier was assisted further away from the burning helicopter. Our attention returned to the others injured in the crash only to realize that—for the third time—the first soldier was again engulfed in flames.

The outcome of being ignited three times was that the soldier, who should have been a survivor, died several days later because of his burns. The reason that he kept reigniting, which was not realized at the time, was because of the heat retained by his highly polished, highly flammable boots. Do not let another soldier die because rescuers are not aware that polish–impregnated boots smolder at a temperature high enough to ignite aviation fuel. *If a soldier has been fuel splashed and ignited, when the fire is extinguished the first time, get those boots off and away!*

SGM Robert Swanson (retired)
2909 Mill Crossing Drive
Fort Washington, MD 20744

Army Aviation Association of America meeting begins 29 March

The Army Aviation Association of America's (AAAA's) Annual Convention will be 29 March–1 April at the Georgia World Congress Center, Atlanta, Ga. The theme will be "Army Aviation: Vanguard of Change."

The 1995 professional program will kick off on Thursday, 30 March, with a presentation by the Army Chief of Staff, GEN Gordon R. Sullivan. Friday will be highlighted by remarks by the Secretary of the Army, the Honorable Togo D. West, Jr., and will also include presentations by Aviation Branch Chief and Commanding General, MG Ronald E. Adams, U.S. Army Aviation Center, Fort Rucker, Ala.; Commanding General, U.S. Army Aviation and Troop Command, MG John S. Cowings, Fort Eustis, Va.; and Program Evaluation Officer, Aviation, Office of the Assistant Secretary of the Army (RDA), MG Dewitt T. Irby, Jr., St. Louis, Mo.

Saturday, 1 April, will feature three special–focus panels: Operations and Training, to be chaired by MG Adams; Acquisition, to be chaired by MG Irby; and Logistics, to be chaired by MG Cowings. Later in the evening, at the AAAA annual banquet, Commanding General, Forces Command, GEN Dennis J. Reimer, is scheduled as the guest speaker.

For more information, contact Bill Harris at 203–226–8184 or fax 203–222–9863 or e–mail 74023.3400@compuserve.com or write to—
AAAA
49 Richmondville Avenue
Westport, CT 06880–2000.

Prep school paves way to West Point for enlisted soldiers

The enlisted soldier probably views his or her chances of an appointment to West Point with the same likelihood as being struck by lightning. Lightning does strike, however, and the enlisted path to the United States Military Academy (USMA) at West Point, N.Y., goes through the United States Military Academy Preparatory School (USMAPS), Fort Monmouth, N.J.

During her freshman year of high school, Antoinette Balich competed in memorized public address with GEN Douglas MacArthur's famous farewell speech to the Corps of Cadets and began to aspire to enter West Point. After high school, she joined the Army Reserve and later the Regular Army, setting up ammunition transfer points for the 229th Aviation Battalion. When she studied the routes to a commission, she discovered that the best way for her, as an enlisted soldier, to become an officer was via USMAPS.

Her dream came true. Cadet Candidate Balich started classes at USMAPS in 1993 and began "Beast Barracks" at West Point in 1994.

The prep school, as it has since 1916, prepares soldiers for the fast–paced academic environment of West Point. During World War I, the prep school first began its mission to provide opportunities to enlisted soldiers by pulling them from the trenches and training them in math and English skills.

To build an academic foundation for West Point, USMAPS uses a meat–and–potatoes academic approach. Training in math and English skills encompasses almost the entire curriculum. In the English department, grammar comes first. Once students prove proficient in fundamentals, they move on to

composition and literature, which provide them a foundation for critical thinking skills. In math, students work on algebra, geometry, and eventually, calculus to provide a foundation to help them through the difficult math courses at West Point. A section in computer skills is taught as well.

Space–shuttle astronaut LTC Charles D. "Sam" Gemar credits the prep school as the place that gave him the opportunity to have a career that, he said, he would "trade for no other. The prep school performed its greatest mission, at least in my case, by getting me prepared academically."

Success at West Point depends on physical, as well as military, skills. At USMAPS, each cadet candidate is involved in either a varsity or intramural sport throughout the year. Activities include such sports as football, soccer, basketball, lacrosse, swimming, and baseball.

Cadet candidates live under a student chain of command similar to that of West Point. Positions in the chain are rotated periodically so that each person gains leadership experience.

West Point Commandant, LTG Howard D. Graves, said that the prep school students act as an important part of the Corps of Cadets. Because they have prior military training and are usually older than their peers, USMAPS cadets are distributed throughout the corps so that their experience and maturity can benefit younger cadets.

The path that Gemar and Balich chose is well travelled. In 1994, the prep school prepared its 10,000th graduate for West Point. Graduates include 64 general officers as well as many Rhodes scholars and decorated veterans of four wars.

No soldier, however—no matter how well–qualified—can go to USMAPS without first applying. The prep school selects 110 Regular Army soldiers from the more than 1,200 applicants competing for appointments to USMA. Those selected then report to USMAPS in late July, to begin the 10–month training session.

If you possess the motivation, drive, and ability required for success—or know someone in your unit who does—applications are being accepted for the prep school class of 1996. Interested soldiers should apply before the 1 May deadline, as admission is competitive.

The applicant should be—

- A U.S. citizen.
- At least 17 but not yet 21 years of age on 1 July of the year entering.
- Unmarried with no legal obligations to support dependents.
- In good health and with no disqualifying physical defects. Pregnancy is disqualifying.
- A high school graduate or the equivalent. Soldiers who graduated in the top portion of their class and did well in mathematics should qualify academically.
- Of high moral character and without a felony conviction by a civilian or military court and with no history of venereal infection, habitual alcohol abuse, or narcotic addiction.

For more information, contact the admissions office at DSN 992–1807/1808 or commercial 908–532–1807/1808 or write to—
Commandant
USMAPS
MAPS–ADM
Fort Monmouth, NJ 07703–5000.

International Liaison Pilot and Aircraft Association meetings

Bill Stratton, who is the leader of the International Liaison Pilot and Aircraft Association (ILPA), and "Gathering Boss," Irv Lindner, remind all ILPA and "wanna–be" members that they need never have been military nor pilots to become ILPA members and to receive the ILPA newsletter, ***Liaison Spoken Here***. Events scheduled for this year include the East Coast ILPA get–together, 6–7 April, at Mocksville, N.C., and the fifth worldwide gathering of L–Birds, Keokuk, Iowa, 23–25 July.

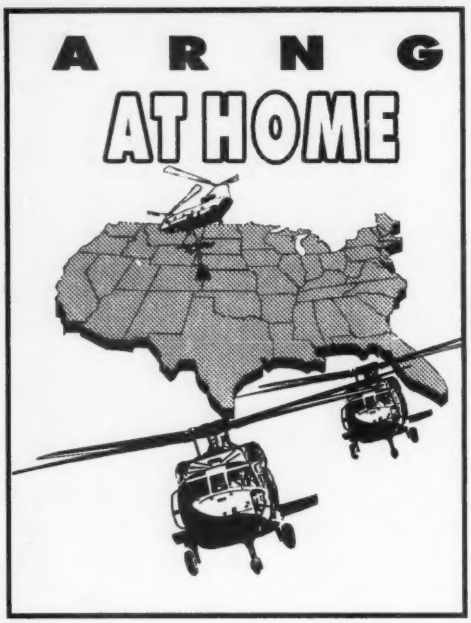
For more information and a complimentary copy of ***Liaison Spoken Here***, write to—
Bill Stratton
16518 Ledgestone
San Antonio TX 78232.

Aviation psychology symposium at Ohio State in April

The Ohio State University will be the host for the Eighth Biennial International Symposium on Aviation Psychology 23–27 April at the Hyatt Regency, Columbus, Ohio, 1–800–233–1234. The objective of the symposium is to examine and improve the role, responsibility, and performance of human operators in the aviation system. Papers will be presented in the usual areas of concern to aviation psychologists and ergonomists.

Half–day workshops will be offered on the first day, followed by paper and discussion sessions for the remainder of the symposium. Expected to attend are more than 600 scientists, engineers, academicians, executives, and pilots from throughout the civil and military aerospace industry and more than 30 countries. The registration fee covers the banquet and proceedings.

For more information, contact Lori Rakovan at 614–292–3533 or internet lrakovan@magnus.acs.ohio–state.edu or write to—
OSU Aviation Program
164 W. 19th Avenue
Columbus, OH 43210–1110.



Force Projection in a Peacetime Environment—Highlights '94

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ARNG Aviation Operations and Training Division
National Guard Bureau
Arlington, Virginia

When not involved in outright conflicts, such as Southwest Asia, Army National Guard (ARNG) aviation helps maintain the Total Army presence, not only within our borders, but outside the continental United States (OCONUS). This issue describes some of the various ways ARNG aviation supports Active Component (AC) deployments; takes part in multiservice and multinational tactical exercises; and maintains readiness, while keeping deployment skills sharpened.

The Infrastructure.

A quick response was needed for the mobilization mission of ARNG aviation's combat arms and combat support roles. To enable such a response, a readiness infrastructure was developed, over time, to accommodate the unique needs of traditional Guardsmen and Guardswomen. Less than 40 percent of each unit is comprised of full–time personnel. An infrastructure was needed to ensure our units, manned largely by traditional Guardspersons, could maintain individual skills and equipment availability to Department of the Army (DA) combat–ready standards. That structure is described early in this issue: An overview of the ARNG Aviation Training Sites (AATS); ARNG aviation's Multi Media Branch; and our Aviation Logistics support structure, which handles the most complex and essential of tasks—equipment availability. Equipment must be available and ready for continuous training of the Guard and immediate deployment upon mobilization.

Missions and Support.

ARNG aviation depot maintenance roundout units (ADMRUs) are detailed in their support mission for AC deployments, as well as their own OCONUS missions by various elements to provide specialized skills at forward locations. Other units' activities include deployments of selected individuals from various combat units to provide cells with skill–specific expertise for such exercises as North Atlantic Treaty Organization Command Post Exercises and Atlantic Resolve (formerly Reforger). Other events included UTARNG's 211th Aviation Group (ATK) continuing deployments to Korea and Japan to support several I Corps exercises, and also support to the U.S. State Department with several AH–64 Apaches to Singapore to provide a U.S. presence at an international trade conference.

Deployment Training.

Within the United States, many units use various deployment means each year to maintain those skills: C–5, C–141, C–130 air movements, rail and convoy shipments, to airborne self–deployments. The seven ARNG Apache battalions deployed an average of 1,500 miles from home station to Fort Hood, Tex., for their final 30–day battalion training and Army training and evaluation program for DA combat certification. Most recently, the Idaho and Ariz. AH–64 battalions (1–183d Avn and 1–285th Avn, respectively) completed back–to–back certifications in summer 1994 to complete ARNG fielding of its sixth and seventh combat-ready, advanced attack helicopter battalions. Beyond the DA–structured AH–64 fielding process, annual training (AT) movements typically involve substantial deployments. These deployments range from detachment to brigade and other divisional assets. Major elements routinely come together during AT for brigade and/or division–level tactical exercises, such as the 49th Armor Division (TXARNG) and the 29th Light Infantry Division (MDARNG and VAARNG). The Tex. division frequently deploys to Fort Hood, also its mobilization station, for large–scale exercises. The Md.–Va. "Blue and Gray" division often joins forces at Camp AP Hill, Va., to include live–fire exercises—or to Camp Dawson, W.Va., and Fort Drum, N.Y., for tactical exercises in semimountainous and remote terrain. In this issue, S.C.'s continuous deployment training in-

cludes company–size loadouts onto Air National Guard (ANG) C–5s at their own McEntire ANG Base where they are co–located with the SCANG F–16 fighter squadron.

Tactical Deployments.

The NCARNG aviation units have developed low–level routes into and out of Fort Bragg, N.C., for night missions from their home station to Fort Bragg training areas and return both weekends and weeknights. 1–211th Avn, with its own aerial gunnery ranges less than an hour away, maximizes its live–fire training in its own backyard. The Northwestern United States is host to I Corps' 66th Brigade, which routinely brings its multistate assets together to combined arms, live–fire exercises at Yakima, Wash., ranges. This training is a mirror image of other multi–State ARNG divisions training across the country.

Force Projection through Simulation.

The "Networked to Battle" article details the beginning of combined arms, multiservice, and long–distance simulation networking capabilities most recently demonstrated in December 1994. AZARNG and FLARNG Apache pilots flew five different simulation devices. These pilots joined forces 2,000 miles apart on the same battlefield against various armor and other ground threats as a company–size force with joint air attack team (JAAT) support. ARNG aviation simulation support at its Eastern and Western AATS will provide opportunities for crews to project their tactical exercises to varied geographic environments as fidelity and equipment capabilities improve.

Other Highlights for 1994.

In Central America and South America, ARNG Panama–based fixed–wing support to U.S. Southern Command continued. Operation "Fuertes Caminos" also continued in Honduras to support rehabilitation operations in nearby Nicaragua. During the Haiti deployment, selected ARNG elements provided support to the 10th Mountain Division, Fort Drum, during mobilization of its equipment. Details of aviation mission support to South American countries will be forthcoming in later issues.

This issue describes the Western AATS training expertise exported to Somalia to support United Nations forces. Later specialized night systems training was provided to a number of other African countries for use in their own operations other than war (OOTW).

Last summer's Eighth World Helicopter Championship took place in Moscow. Members of the all-Guard 1994 U.S. Precision Helicopter Team earned Silver Medals as they took second place against some 40 crews from seven other nations in the competition. ARNG aviation continued modernizing into the UH–60 Black Hawk and CH–47D Chinook helicopters. In the midst of fielding C–NITE Cobras to regimental and division cavalry squadron, the ARNG already has begun fielding yet another advanced aircraft system—the OH–58D (Armed) Kiowa Warrior. The Kiowa Warrior went first to Miss.' 1–185th Command Aviation Battalion's Target Acquisition and Reconnaissance Company. The aircraft was fielded to other units as determined by DA's Kiowa Warrior fielding plan.

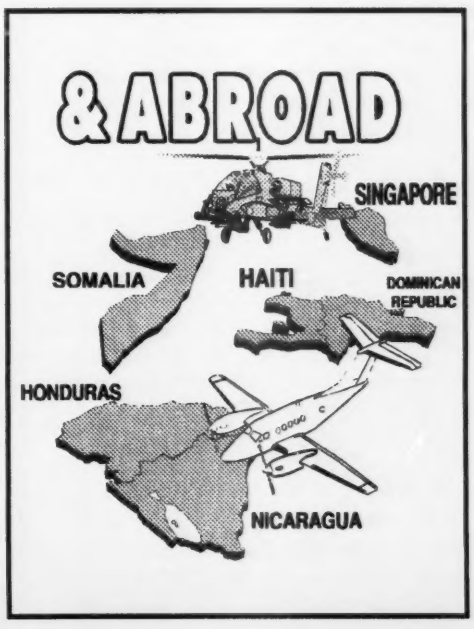
Operations Other Than War.

Some of the articles in this issue reflect a thread of OOTW. That thread inevitably is woven into the fabric of many missions assumed by Army aviation. For most CONUS missions in the OOTW category, the ARNG and ANG Citizen–soldier is typically "first in and last out," because that person lives and works in the affected community. His or her Guard unit is always ready and immediately available to offer a helping hand.

For that reason, the ARNG is recognized as "America's Community–based Defense Force." These military organizations are the foundation for needed missions in a nonhostile environment. In effect, they are Compo One when disaster strikes at home. The Governor of the affected State may bring in reinforcements from active duty counterparts if needed.

For more than three centuries, Citizen–soldiers and their affiliated units have provided instant reaction to a wide variety of natural disasters and regional hardships whenever required. The March–April 1995 ***Aviation Digest***, and continuing issues, will detail the fullest possible scope of the Guard's OOTW responsibilities.

Editor's Note: In November 1994, the Army Aviation and Safety Directorate, Army National Guard Readiness Center, invited various States to submit material for a special Army National Guard issue. The response was overwhelming. The Directorate was literally flooded with articles covering the full spectrum of ARNG aviation activities— Therefore, it was decided to concentrate first on ARNG aviation force projection, then devote a special section in the March–April issue to OOTW that are supported by the Guard.



Army National Guard Aviation Training Sites (AATS)

Many of you are aware of the Army National Guard (ARNG) Aviation Training Sites (AATS). These training sites were set up to train ARNG aviation personnel. Many of you may not know these training sites train enlisted ARNG members. That is correct, these are *aviation* training sites, not aviator training sites.

Over the past few years, many training programs and articles have stressed the need for aviator training. An occasional article is written about training noncommissioned officers (NCOs). Leadership and technical tracks are mentioned, but no real emphasis has been placed on training the enlisted members beyond advanced individual training.

Enlisted members make up the vast majority of the Armed Forces including Army aviation. These soldiers maintain the multimillion dollar aircraft. These NCOs train and supervise the soldiers who maintain the multimillion dollar aircraft. It makes sense that we would want to emphasize their continued training.

With the Aviation Restructuring Initiative, many units are changing missions and aircraft. The AATS can help these units immensely. Using Reserve Component Configured Courseware (RC^3); the AATS conducts military ocupational specialty (MOS) transition courses. These transition courses are geared towards soldiers that already hold a 67 career management field (CMF) MOS. That means no time is needed to train students how to read technical manuals or to use precision tools, common hardware, and other basic 63 skills. The course consists of airframe specific training. It is 4 weeks long as opposed to 8 to 14 weeks. Unit readiness is enhanced and training resources are more efficiently spent.

At some point, each NCO needs to attend the next level of education/training: The Basic Noncommissioned Officer Course (BNCOC). During BNCOC, the NCO receives more intense training, which consists of common leadership training, more basic soldiering skills, and aviation-specific training.

Again, the AATS can help. Using the RC^3, BNCOC is broken down into three phases. Regional NCO Academy handles Phase I, the common leadership training. The AATS completes the training with Phase II and III. Phase II is common aviation management. All CMF 67 series students receive this portion. During this phase, safety, inspection techniques, and use of forms and records are emphasized.

Phase III is MOS-specific. During this phase, students receive training geared to their specific airframe or specialty. This includes training in inspecting work on the aircraft and the paperwork that goes with it. Completion of BNCOC qualifies the NCO to become a technical inspector. Each of these two phases is 2 weeks in length.

The next level of education is the Advanced Noncommissioned Officer Course (ANCOC). CMF 67 ANCOC Phase II is conducted at the AATS, and is 2 weeks in length. ANCOC is geared towards maintenance management.

The continued education of our enlisted soldiers is paramount to our units' readiness and to the safety of the officers that fly the aircraft.

The AATS can accomplish this mission.

Supporting the Ground Commander—Army National Guard Aviation and the Counterdrug Mission

Captain Andrew W. Batten
Detachment Commander—RAID
South Carolina Army National Guard (SCARNG)
Columbia, South Carolina

Supporting the ground commander is a time-honored tradition and role for Army aviation, one which the South Carolina Reconnaissance and Interdiction Detachment (SC-RAID) is applying to counterdrug aviation support. Unique to this mission is support provided to law enforcement "ground commanders" not to military ground commanders.

In S.C., these law enforcement commanders consist of sheriffs, police chiefs, and supervisory agents of the State Law Enforcement Division, Drug Enforcement Administration, Federal Bureau of Investigation, U.S. Postal Inspection Service, U.S. Marshals Service, etc. The mission is unique since it is not one of training but of ongoing operational support focused on combating the production, transportation, and distribution of illegal drugs within S.C.

The mission statement of the RAID is simple and straight forward: To provide local, State, and federal law enforcement agencies with aviation support for counterdrug operations.The execution of the mission is much more complex since the type of support is as varied as the agencies supported. The mission is driven by the needs of the supported agency whose operation is normally dictated by the whims and idiosyncrasies of the criminal organization. Most often the criminal operates under the cloak of darkness without much advance warning. Therefore, the SC-RAID remains on-call to provide timely and effective support.

Aircraft of the SC-RAID deploy throughout the state to support the law enforcement commander. The RAID aircraft are OH-58 Kiowas configured specifically for the law enforcement mission. They include thermal imaging systems and Wulfsburg radios, which are compatible with most law enforcement communication systems. Some specific RAID missions involve radio relay, fugitive search and tracking, surveillance of vehicles transporting illegal narcotics, and the confirmation of indoor marijuana grow houses.

Success of the RAID is measured by how effectively it assists the ground commander in accomplishing his objectives. This may mean the seizure of a kilo of cocaine, the apprehension of a dangerous felon, or the safe execution of numerous arrest warrants. Success also is measured by the positive impact our efforts have in the communities throughout the State.

Despite the specific mission, the SC-RAID remains trained and ready to support the law enforcement commander in fighting the illegal trade of narcotics in S.C.

WESTERN ARMY NATIONAL GUARD (ARNG) AVIATION TRAINING SITE (WAATS) —

Range Firing—Zero Mishaps

About 30 weeks out of the typical year, the Western ARNG Aviation Training Site (WAATS), Range Operations Section, Marana, Ariz., departs for the Barry M. Goldwater Aerial Gunnery Range located near the U.S. Air Force auxiliary (AUX) field at Gila Bend, Ariz.

The WAATS began aerial gunnery training at Gila Bend in the spring of 1987. The arming, de–arming, and refueling of aircraft was accomplished in a natural desert area adjacent to the tarmac ramp at Gila Bend AUX field. The operations moved to a hard surface ramp a year later. In 1992 six re–arm pads were constructed. A ramada shelter and storage area with connecting roadways completed the project.

Today the WAATS Range Operations offers one of the most challenging aerial gunnery ranges in the world where temperatures consistently reach 50 degrees Celsius during the summer months. Working near maximum gross weight while firing munitions in the form of 2.75 folding fin aerial rockets (FFARs) and 20mm cannons requires that our highly skilled instructors administer a strict regimen of instruction.

Since inception of the WAATS, the "range rats," a name used affectionately by AH–1 Cobra instructor pilots, have safely fired the following munitions while maintaining a zero mishap rate: 2,800,000 rounds of 7.62mm; 80,000 rounds of 20mm; and 27,000 FFAR 2.75–rockets.

The range rats are assigned to the plans, training, and mobilization branch of the WAATS. The selection is a close knit organization with high morale and *esprit de corps*. Once selected to be a member of the range rats, individuals receive thorough training in their assigned position and are cross–trained into a secondary military occupational specialty (MOS). Members are graduates of the Instructor Training Course (ITC), Small Group Instructor (SGI), and Aviation Mishap Prevention Orientation Course (AMPOC). While in garrison the section conducts courses to train ARNG aviation members with proper techniques in arming, de-arming, and repair of AH–1 weapon systems.

The Gila Bend AUX Field experiences several catastrophic mishaps each year. Not blessed with indigenous medial and administrative support aircraft, the U.S. Air Force at Gila Bend often requires assistance in the aforementioned areas. This support often is supplied by the WAATS UH–60 Black Hawk aircraft in the form of medical evacuation (MEDEVAC) and administrative assistance during aircraft accidents.

The mission could not have been accomplished if not for the outstanding support received from LTC James Keck and the 56th Support Group (Gila Bend) at Luke Air Force Base, Phoenix, Ariz. Through the spirit of support, the range rats have become members of the Gila Bend Air Force AUX field. They have gained the fellowship and admiration of the U.S. Air Force community.

RAID Training

Reconnaissance and Interdiction Detachment (RAID) training is conducted at the Western AATS. The National Guard Bureau tasked the Western AATS to provide the initial fielding training for the 32 States authorized such units. The RAID training provides States with an aviation capability to meet the growing demands for Counterdrug Operations Support (CDOPS).

In 1993 the WAATS trained 45 pilots from 11 states in RAID operations. RAID training is done at night. The RAID section of three instructor pilots (IPs) flew over 400 hours to accomplish the training mission. Both the RAID and High Altitude Training Site missions entail greater risks; however, the pilots accepted both after properly assessing the risks and understanding the rationale and philosophy behind each.

RAID training is taught only at the Western AATS. It inherently carries a very high risk assessment because of the nature of the mission. The RAID mission is conducted only at night using sophisticated night detection devices while coordinating as many as six radios with both ground and air law enforcement agencies. The RAID training branch and their detachments throughout the United States have compiled a perfect safety record. This indicates the strong safety program that is woven throughout the Western AATS safety philosophy.

EASTERN ARNG AVIATION TRAINING SITE POISED FOR THE 21st CENTURY

Colonel Kenneth O. Boley
Commander, Eastern ARNG Aviation Training Site (EAATS)
Fort Indiantown Gap, Pennsylvania

America's Army is rebuilding itself into a 21st century force—a power projection Army. As it does, the Eastern Army National Guard (ARNG) Aviation Training Site (EAATS) is restructuring to meet this challenge and support the new Active/Reserve offsite agreement. Radical changes have occurred at both Fort Indiantown Gap, Pa., where the EAATS is headquartered, and at Clarksburg, W. Va., where the EAATS Fixed Wing Detachment is located.

In 1981 the EAATS began its first year of training ARNG aviators in pilot, instructor pilot (IP), and night vision goggles courses. Aircraft on the ramp included the OH–6 Cayuse and CH–54 Chinook and T–42 Cochise and U–8F Seminole aircraft. In 1994, the ramp looks different. CH–47Ds and UH–60 Black Hawks have replaced the older systems at the Gap. At Clarksburg, C–26 Metroliner, C–23 Sherpa, C–12 Huron, and U–21 Ute airplanes comprise the ramp. The ARNG Aviation Program came into existance in the 1990s. With this program, modern aircraft systems such as the Chinook and the Black Hawk were added to ARNG units. Training seats to qualify pilots in the new aircraft were at a premium. By 1993, the requirement for training increased significantly. Readiness would have been adversely affected unless more quotas were made available. Directed by the National Guard Bureau (NGB), the EAATS immediately refocused from mature systems to modernized aircraft. The EAATS sent senior IPs to the U.S. Army Aviation Center, Fort Rucker, Ala., to qualify in the CH–47D and the UH–60. IP qualification and extensive seasoning at Fort Rucker teaching courses in modernized systems followed this training. By the start of Training Year (TY) 1994, in one short year, the EAATS had transitioned from mature to modernized rotary wing aviator training.

Not to be out done, the Fixed Wing Detachment was likewise transformed. The Guard retired the old U–8F and T–42 and replaced them with factory C–23s and C–26s. Again, IPs were re-

Fort Indiantown Gap, Pa., located in South Central Pennsylvania is the home of the EAATS.

A C–26 Metroliner supported by the EAATS fixed wing detachment.

trained to fly the modernized airplanes. These IPs immediately began to train pilots from all 50 States, the District of Columbia, and the territories. The detachment continued to conduct training in several versions of the U–21 and C–12 airplanes, which provide backbone fixed wing support to the States. Plans are underway for a 30,000–square–foot hanger and classroom complex to support training. Besides the ARNG, support plans outline training relationships with the recently formed Operational Support Airlift Command.

In TY 1993, the only enlisted course conducted at the Eastern AATS was a 67V (OH–6/OH–58 Kiowa) helicopter repairer course with a quota of nearly 100. Training ceased in June 1993. The Academic Branch of the Training Site was reorganized to accept a totally new expanded training mission. During TY 1994, the Chief of Enlisted Training and 12 enlisted instructors executed a training program of 11 separate enlisted courses, training a total of 584 students. Through the use of guest instructors, and expanded housing, the TY 1995 enlisted training load is projected to be 1,300.

As far as enlisted training, military occupational specialty (MOS) courses are offered for the UH–1 Huey, UH–60, and CH–47D repairers. Noncommissioned officer education courses also are being conducted using U.S. Army Training and Doctrine Command–approved programs of instruction. The courses included the Basic NCO Course, Common Aviation Management Phase IIA, and Phase IIB MOS specific subjects for 67N, 67T, and 67U soldiers. Phase II of the Advanced NCO Course was offered for all CMF 67–series and 93P, Aviation operations specialist soldiers. The Basic NCO Course for 93P rounds the enlisted training program. More training will qualify flight engineers in the CH–47D and the C–23 aircraft. Flight engineer courses center around the requirement to have a qualified enlisted crewmember on board the aircraft. These courses provide expertise in aircrew coordination between pilots and flight engineers.

To remain cost efficient, the training site continues its commitment to simulation. During 1994, Headquarters, Department of the Army (HQDA), reassigned a UH–60 flight simulator from Fort Ord, Ca., to the EAATS. The simulator supports qualification training and provides regional support to the Black Hawk community in the Northeast. During TY 1995, the EAATS is programmed to break ground on a 50,000–square–foot simulation complex that will house both a UH–60 and a CH–47 simulator plus a night vision laboratory, altitude chamber and, when available, the Aviation Combined Arms Tactical Trainer (AVCATT).

During TY 1994, the EAATS was one of the most proactive aviation units in the area of aircrew coordination training. To support this HQDA–emphasized program, the site qualified proper unit cadre and taught the trainer's course to 44 IPs. The EAATS has 256 students programmed to attend the course in TY 1995. The site will continue to operate the UH–1 and AH–1F Cobra simulators that average 10,200 training sessions per year. To date, the site has provided over 215,000 hours of simulation support to Army aviation.

The ARNG aviation force structure will continue to receive modernized aircraft systems. As it does the EAATS will continue to provide qualification, sustainment, and professional development training to pilots, IPs, and enlisted crewmembers. This training will ensure units have well–trained, fully qualified aviators and mechanics.

Under the leadership and guidance of the NGB, the EAATS is poised to accept the challenges of the 21st century.

Multi Media Branch—A Multi–Talented ARNG–Unique Asset

Major T. Cowart
Chief, Multi Media Branch
Fort Rucker, Alabama

The Multi Media Branch

Experiencing the spin of an OH–58 Kiowa during loss of tail rotor effectiveness...struggling through chest–high snow and bone–chilling, 34–below–zero cold...sweltering in 120–degree desert heat...alone at 11,200 feet with only coyote tracks for company...and traversing in the gunner's seat of a ZSU 23–4 . . . we were there. A short time later in the comfort of a briefing room of an Army National Guard (ARNG) flight facility—and through the magic of electronic imagery—the Guard aviation force was there as well.

Members of the ARNG Multi Media Branch (MMB), Fort Rucker, Ala., experienced these conditions while producing television programs for ARNG aviation. These MMB productions along with other audiovisual and printed materials impact on about 6,000 aviators and 23,000 enlisted personnel through a learning center network. Learning centers are located at the 99 aviation facilities throughout the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands. The MMB also supports the ARNG Safety and Occupational Health program, with developed materials impacting on the total ARNG force of more than 400,000.

The MMB is under the operational control of the Director, Army Aviation and Safety Directorate, National Guard Bureau (NGB); it is under the military control of The Adjutant General, Alabama National Guard. The U.S. Property and Fiscal Officer for Alabama provides logistical and fiscal support. The MMB came into being on 24 August 1973 when Fort Rucker approved an interservice support agreement and granted the organization official sanction as a tenant activity. Besides providing physical support arrangements, the agreement allows the MMB to work directly with Fort Rucker agencies in preparing instructional materials.

The MMB develops training, safety countermeasure, and special materials addressing the unique requirements of the Guard materials in standard audiovisual media and print formats, along with unique print formats through Government Printing Office contracts. This capability is possible because of a media–oriented staff and a modern 5,000–square–foot facility. The facility houses a television studio and two postproduction suites, videotape reproduction lab, audio recording suite, photo lab, and a graphics shop. A television production van, acquired in July 1988, houses state–of–the–art, and 1–inch video recording and editing equipment. The van enables MMB to produce materials in remote locations.

The MMB staff consists of seven excepted civil service Guard technicians and one competitive civil service employee: a branch chief; two training specialists who design, develop, and implement aviation and safety programs; a visual information specialist who does all graphic art work; an audiovisual production officer who operates the television production van and in–house postproduction video editing system, supervises audio recording sessions, and does all photographic work; an audiovisual production specialist who assists in production (from lighting to TelePrompTer operations); an electronic technician who daily maintains the various electronic systems; and a media assistant who does administrative functions for the organization, mass reproduces video productions, and satisfies requests for video programs.

MMB differs from other audiovisual organizations in its ability to proceed from an internally identified requirement to the end result of a fielded program. Examples are quarterly productions of the Aviation Accident Review and Information Update.

Since 1984, through quarterly television presentations, the aviation force has been briefed on different subjects: Guard accidents, operations, maintenance, standardization, and aviation life support equipment. These quarterly reviews, with other audiovisual and printed materials, have played a significant part in the Guard's outstanding aviation safety record this decade. The ARNG aviation program recorded its second zero Class A accident year in fiscal year (FY) 1994. The Multi Media program's success is due to close personal communication channels maintained with the Army Aviation and Safety Directorate; State Army Aviation Officers (SAAOs); and commanders and aviation safety officers at the 99 aviation facilities and Active Army, as well as other governmental and industrial, agencies.

Another important factor is the timely dissemination of information, which enables exceptional standardization throughout the Guard. Effective communications and the expertise of its personnel greatly add to the success of the MMB's safety and occupational health efforts.

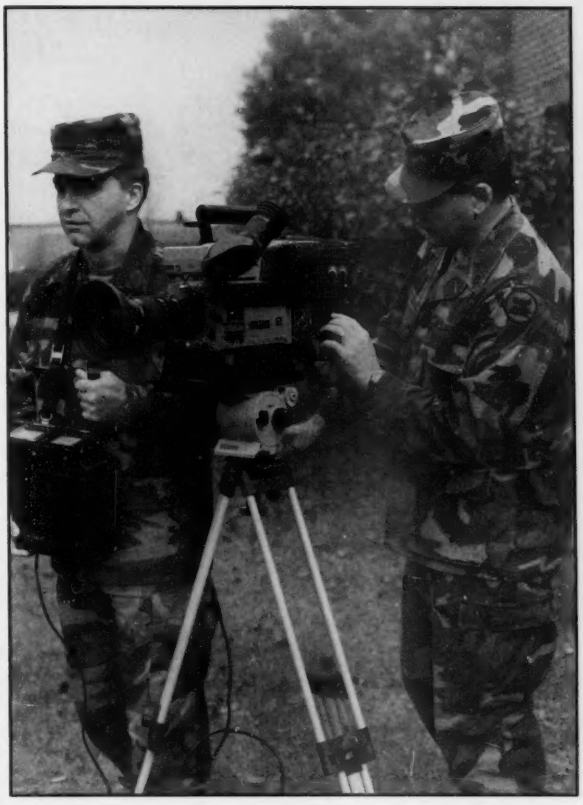
The MMB continues to modernize both graphic and television systems. It is recognized for the sophisticated television editing capabilities of its systems plus its versatile graphic computer equipment and software for television productions and standard graphic products.

Many of MMB's audiovisual and printed programs are unique within the Department of Defense. For example, an annual aviation safety countermeasure program, known as Safe–Flight, involves a television presentation, supplemented by recall devices to remind the field of the program's message.

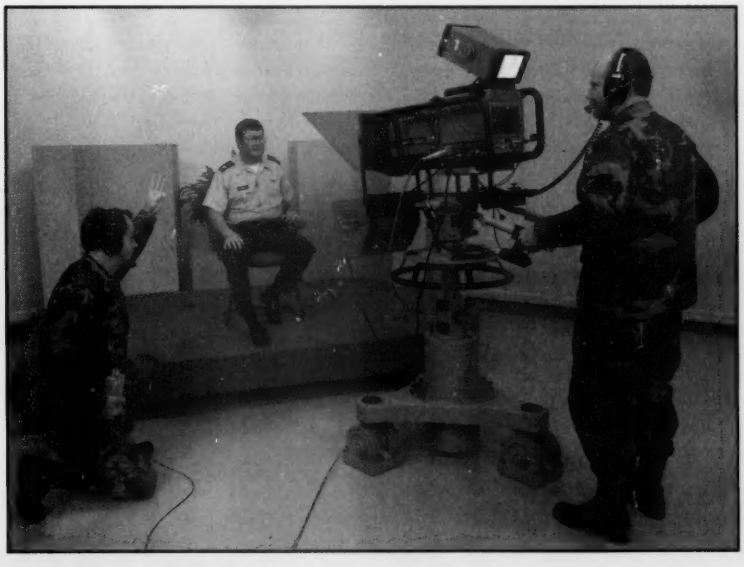
Several times a year, the Director of Army Aviation and Safety, NGB, Colonel Joseph E. Ferreira, shares important new information with the 54 SAAOs through television presentation.

Another MMB program includes an effective communications course presented to more than 1,100 ARNG personnel at 19 flight facilities in 17 states. The 6–hour program deals with improving communications and learning to effectively manage interpersonal relationships. The goal of this course is the prevention of accidents and injuries.

The general safety and occupational health efforts of MMB are as important as its aviation efforts. In some cases, they may be even more important because they impact on the entire ARNG force. MMB's main general safety effort is an annual program known as the Safe–Guard countermeasure program. The main element of Safe–Guard is a television presentation designed to be viewed by each Guard member before attending annual training (AT). Supporting the audiovisual presentation is a plastic laminated calendar card reflecting the theme of the year's program. The card is designed to serve as a constant reminder of the program's safety message. To ensure most Guard members use these cards all year, a place is provided, by month, for entering drill dates. Another place allows AT dates to be recorded. Each fall, Guard members look forward to the new calendars that allow them to keep up with their training dates.

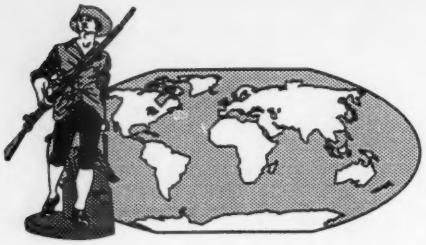


A second support element is a high–quality, crack–and–peel recall sticker. This sticker reminds Guard members of the year's safety theme and message. Stickers from the initial "AT 80—15 Days to Success" program are still seen throughout the Guard on lockers, desks, and briefcases. A last element of some Safe-Guard programs is color posters. As in the aviation program, these posters stress various safety subjects. They are in use at virtually all ARNG armories, maintenance facilities, and training sites.



Another recent general safety contribution by MMB includes a six–page color brochure. In this brochure, Major General John R. D'Araujo, Director of the Army National Guard, outlines his safety philosophy to every ARNG officer, noncommissioned officer (NCO), and supervisor. A television production featuring Sergeant Major Larry M. Pence, the Command Sergeant Major of the ARNG, was provided recently to all States. The production stressed the safety responsibilities of NCOs. These two programs reflect the sincere concern and emphasis given safety by the highest levels of the ARNG structure.

The MMB program has experienced significant evolution and growth since its inception in 1973: more operating equipment, total involvement in the ARNG aviation and safety efforts, and increased emphasis at the NGB level. Because of this growth, the future promises excitement and challenge for this unique organization.



The CW5 Program in Army National Guard Aviation

CW5 Gary J. Eisenbraun
Aviation Personnel Management
Army National Guard Readiness Center
Arlington, Virginia

The Army National Guard (ARNG) Aviation program received its first Chief Warrant Officer (CW) 5s on 1 April 1992. On that date, three of the first six CW5s promoted were Aviation warrant officers (WOs): CW5 Bankston, Minn.; CW5 Skiba, Mass.; and CW5 Stewart, N.J., the first aviators to be promoted in the ARNG.

Current CW5s

The 29 ARNG Aviation CW5s as of 15 November 1994 are—

William F. Vawter, Ala.
David R. Watson, Ariz. (WAATS)
John A. Harris, Ariz. (WAATS)
Cletus J. McMurtry, Ariz. (WAATS)
Anthony N. Adolf, Ariz.
Robert S. Cabell, Colo.
Edmond A. Lafantasie, Conn.
Major N. Travers, Del.
Kenneth W. Bording, Fl.
Robert E. Truitt, Ind.
Lawrence R. Burbank, Kans. (NGB)
Gary J. Eisenbraun, Kans. (NGB)
Robert A. Skiba, Mass.
Keith S. Harris, Md.
Charles A. Foster, Md.
Charles R. Dudek, Mich.
James D. Bankston, Minn.
Francis W. Solis, Miss.
David S. Parrish, Mont.
Robert C. Wehrenberg, N.C.
Neal E. Jacobson, N.Dak.
Richard F. Andrews, N.J. (NGB)
Norman Stewart, N.J.
Lynn M. Billow, Nev.
Gerald L. Hess, Pa.
Reed M. Zellers, Pa.
Robert D. Ezell, Tenn.
John V. Fowler, Tex.
Eugene A. Williams, Wyo.

Promotion Criteria

The promotions to CW5 started in the National Guard. The first 11 CW5s promoted within all of the uniformed services belonged to the ARNG, and the numbers continue to grow.

According to Standard Installation/Division Personnel System (SIDPERS) data, about 56 CW5s are in the ARNG, of those 29 (52 percent) are aviation warrants.

The key to wider dissemination of the CW5 rank is the promotion criteria. The requirements for promotion are—

. Five years' time in grade as a CW4.

. Assignment to an authorized and coded CW5 position.

. Successful completion of the Warrant Officer Senior Staff Course (WOSSC).

WO Rank Structure

The new structuring of WO ranks places the authorization for increased rank with the requirement of increased responsibility. Current modification table of equipment/table(s) of distribution and allowances (MTOE/TDA) documents identify CW5 coded positions by entry of ôMWö in the branch column. The new rank coding replaces the ôMWö with ôW5ö. The conversion of the MTOE/TDAs has been completed. DA Circular 611–94–1, dated 26 August 1994, implements the new rank coding and should be referred to to identify positions to be coded as W5 on the table of Army allowance and distribution system (TAADS). The CW5 position is placed at a level that requires a highly specialized technical manager. To place this into perspective, an example follows:

The aviation company contains WO1s, CW2s with a few CW3s placed in areas of increased responsibility. (For this example, we will follow safety management.) The CW3 company safety technician executes the company safety program and monitors the operation of the assigned pilots. At the battalion, the CW4 conducts the battalion program and monitors the subordinate company programs. The CW5 at the brigade level would manage a safety program that would span several battalions and numerous companies.

The only exception to this example is within the CH–47 Chinook community. Because of the aircraft size and mission, the levels of responsibility have been reduced one level. CW4s are placed at company level with CW5s at the battalion level.

The TDAs require a written request for change that must be submitted to NGB–ARF–IC for approval. The circular authorizes no new structure. Existing positions must be converted to use the new coding.

STAC Positions

The circular lists four new positions that apply to a State Area Command headquarters:

. State aviation safety officer.

. State aviation maintenance officer/maintenance test flight evaluator (ME).

. State rotary wing standardization officer.

. State tactical operations/training manager.

Placement in an authorized CW5 position is mandatory before enrollment in the WOSSC. The original 8–week course has been replaced with a 2–week version. The shortened version has allowed a greater participation by ARNG WOs and enrollment has increased dramatically. For example, the June 1994 class consisted of 15 personnel from the ARNG and 15 from the U.S. Army Reserve (USAR). This increased access to advanced schooling will accelerate the rate of promotions and allows the ARNG to use their senior WOs to their fullest capacity. Once promoted to CW5, the rank is not withdrawn if assigned to a CW4 position.

TDA Changes

Requests for changes to the existing TDA should be routed from the State Force Integration Readiness Officer (FIRO) through NGB–AVN–OP to NGB–ARF–IC.

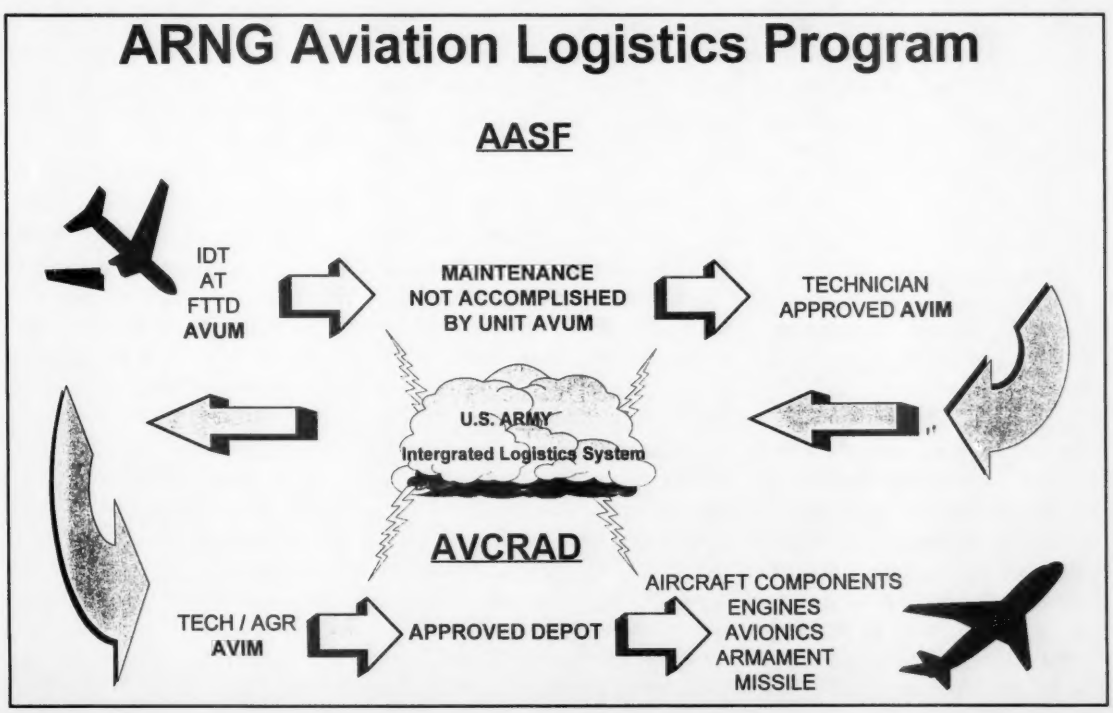
CW4 Suzanne Curtis (DSN 327–7846), NGB–ARF–IC, approves changes to ARNG TDAs. CW5 Jack Lynch (DSN 327–9517), NGB–PO, is the proponent for CW5 TDA position rank coding within the ARNG and ensures all CW4 upgrades meet the criteria as listed in the Army and ARNG regulations. He is the ARNG WO Programs Manager. Major Bud Gamble (DSN 327–7836), NGB–ARF–PC, staffs and posts changes to ARNG MTOEs. CW5 Gary Eisenbraun (327–7719), NGB–AVN–OP, serves as the Aviation Personnel Manager and the point of contact within the Aviation and Safety Directorate.

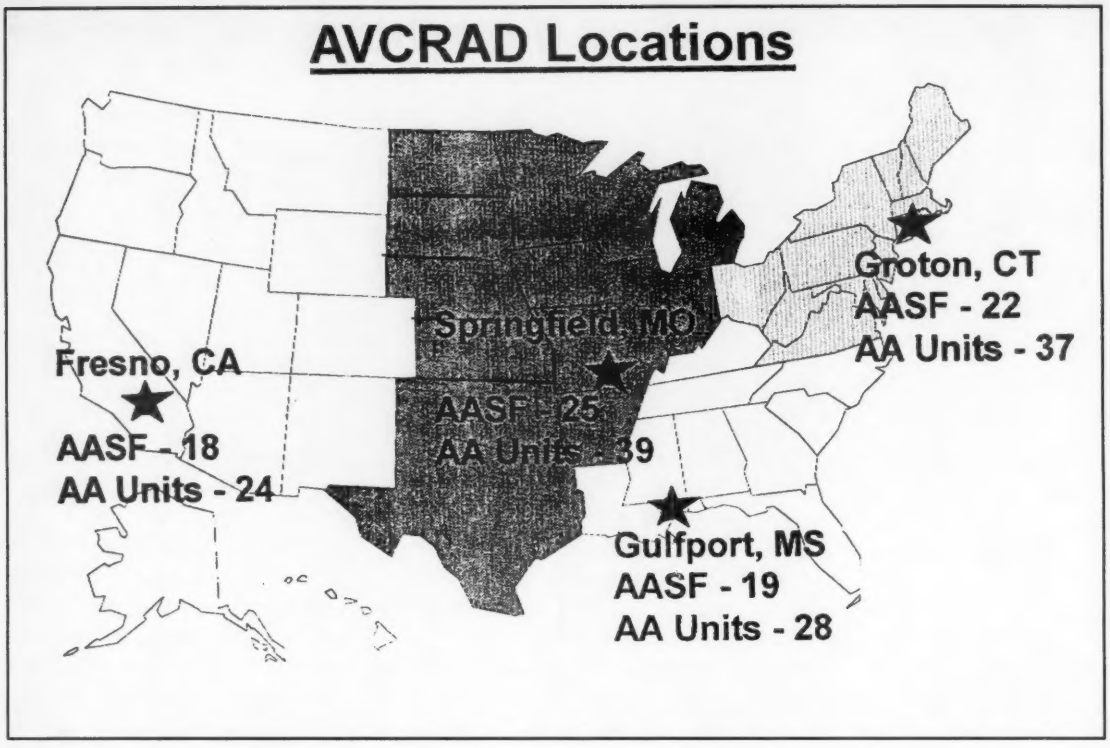
ARNG Aviation Logistics—A Complex Task

Mr. Alberto J. Jimenez
Chief, Aviation and Systems Division
National Guard Bureau (NGB)
Arlington, Virginia

Traditional aviation logistics functions—quality,maintenance, and supply—are integrated throughout aviation units in our Army. How can these functions be performed effectively and efficiently for Army National Guard (ARNG) units when their training and maintenance opportunities are about two or three times per month? How can the ARNG maintain its fleet of modernized and not so modern aircraft? Often times, these questions appear to cloud the decisionmaking of aviation leaders outside the ARNG. This overview of the peacetime logistics structure of the ARNG aviation program—its mission and functions—should help answer those questions and give a better perspective on how the program works.

Force structure of aviation units is allocated to the several states with thought given to demographics, unit integrity, and Corps or Divisional alignment. Each State and Territory is provided with the first echelon of aviation logistics—an **Army Aviation Support Facility** (AASF). These facilities vary in size and design. However, they provide the maintenance hangar; shops; supply and storage rooms; and all other related functions, space, and equipment required to support the aviation unit's aircraft and systems assigned for support. The AASF's primary purpose is to maximize efficiencies in logistics and enhance training and maintenance supervision toward a well–maintained, ready fleet. AASFs throughout the country are given aviation unit mainte-





nance (AVUM) and selected aviation intermediate maintenance (AVIM) authority and capabilities to support aircraft and associated systems. AASFs are manned with military technicians (DA civilians with mandatory membership in ARNG aviation unit compatible position). These organizations are the "backbone" of ARNG aviation logistics. They provide the vital day–to–day link that supports the commander's logistics program. Without them, the maintenance and related logistics functions not completed by the unit during their scheduled training periods would have to "sit–in–wait" until the next training day, which is not an acceptable situation.

Because of this infrastructure at each State and Territory, the ARNG recognized that maintenance may exceed the AASF authority and capability. A higher support organization must exist to provide backup support to the AASFs (page 17). These organizations, regional logistics facilities with full AVIM and selected Depot Repair Authority, are called Aviation Classification and Repair Activity Depots (AVCRADs). Four AVCRADs located at Groton, Conn.; Springfield, Mo.; Gulfport, Miss.; and Fresno, Calif. (map above). They are one–of–a–kind deployable table of organization and equipment (TDA) organizations that provide AVIM, depot, and repairable exchange. Unique to the ARNG, is its management of the regional Stock Funded Depot Level Reparable (SFDLR) program. Also, as added missions, repair programs to support mature ARNG aircraft—i.e., the UH–1 Huey, OH–58 Kiowa, OH–6A Cayuse, and AH–1 Cobra—undertaken at these AVCRADs. Limited special programs also are included in the AVCRAD's workload, like modification of OH–58A aircraft for counterdrug mission support.

These two basic organizations, the AASFs and AVCRADs, provide the day–to–day logistics support to all aviation units assigned to the ARNG throughout the continental United States and its territories. Their strength rests on the highly trained, skilled, experienced, and stable work force of the ARNG Aviation Program. Aviation officers and staff assigned to each State Headquarters carry out management and program supervision. A team of logisticians from the Directorate of Aviation and Safety, NGB, supports them.

Complex, yes. Functional,...you bet! ARNG Aviation logistics managers ensure units and their supporting AASFs have well–defined, clearly understood, coordinated logistics efforts that provide continuity from the units in training to the supporting organizations. Only when these parameters are properly integrated does the logistics program work. And it is working for the ARNG. Our ARNG aviation logistics is a thoroughly integrated, intensively managed program that maximizes manpower, facilities, and equipment. Thereby it provides the support required to all ARNG aviation units' aircraft for mission support, and achieving maintenance excellence that is second to none.

Force Protection — A Success Story

Lieutenant Colonel Richard A. Sherman
Chief Aviation Safety Branch
Safety and Occupational Health Division
Aviation and Safety Directorate
National Guard Bureau
Arlington, Virginia

In Fiscal Year (FY) 1994, the Army National Guard (ARNG) achieved another milestone. For the second time in 5 years, Guardsmen and women completed the year without a class A aircraft accident while flying over 340,000 hours. At the end of the FY, the ARNG had flown over 18 months without a class A aircraft accident. For the past 5 years, the class A aircraft accident rate has been 0.36 accidents per 100,000 hours flown. The number of hours flown during this time was well over 1.8 million hours. This achievement is remarkable considering the mix of modernized and mature, aging aircraft as well as the requirement to meet Army standards.

The National Guard Bureau (NGB) is the channel of communication among the States, Territories, and the District of Columbia and the Department of the Army. The Safety and Occupational Health (SOH) Division within the NGB communicates directly with the State Army Aviation Officer (SAAO) in each State. The SAAO has direct oversight of the ARNG aviation program for the Adjutant General. The day–to–day Aviation force protection program manager is the instructor pilot/aviation safety officer (IP/ASO). The IP/ASO works full–time at the Army Aviation Support Facility (AASF). This person provides the safety interface with the units and individual aircrewmembers supported by the facility and manages the facility safety program. ARNG force protection policies and programs may originate at the NGB, but their management is decentralized to the States for execution.

This system works for the ARNG because it is built on a solid foundation and managed by dedicated professionals who believe that force protection is not just a program, but also an attitude integrated into the aviation community's way of doing business. The program is built on three interlocking cornerstones: training and education, awareness, and countermeasures. Each is integral to the success achieved over the years.

The training and education program is synonymous with standardization and safety. Formal courses are attended by Guard personnel at various U.S. Army Training and Doctrine Command (TRADOC) installations and the ARNG Aviation Training Sites (AATS) located in Pennsylvania, Arizona, Colorado, and West Virginia. Formal safety courses are not available to the majority of our soldiers since these courses are geared for the safety professional. The ARNG provides the opportunity for all aviation personnel to receive formal safety training through the Aviation Mishap Prevention Orientation Course (AMPOC) conducted at the Eastern and Western AATS. The 10–year old course has educated and graduated over 3,000 highly motivated Guardsmen and women.

The awareness program aims to make each member of the aviation community conscious of accident trends and safety concerns as well as each person's responsibility toward accident prevention. The vehicles used to achieve awareness are quarterly safety meetings, the quarterly accident review and information update video, annual safety standdowns, and other print and video media.

Countermeasures are ongoing programs or may be a one–time shot at reducing or eliminating a hazard. Successful countermeasures that have reduced accidents within the ARNG include the annual SOH workshop attended by the key safety personnel in each State, the annual IP/ASO workshop, and the regional accident prevention survey (RAPS) program. The SOH workshop and the IP/ASO workshop provide updates to the Safety Program, awareness of accident trends and prevention techniques, and an invaluable interface with counterparts from other States. The RAPS is a program through which an AASF from one State conducts a survey on an AASF in another State. The value of the program is that, not only does the surveyed facility receive a detailed analysis of its overall program, but also the survey team learns how another facility conducts business.

The list of successful programs within the ARNG force protection program are too numerous to document here. The primary reason for this success is the dedication and professionalism displayed by the men and women of the ARNG. To remain a successful program, each person must do his best to analyze each situation, assess the risk, implement risk management, and perform to a standard. The program also requires dynamic and innovative leaders setting and enforcing high, but achievable, standards focusing on force protection. Successful force protection requires the integration of safety principles, practices, and procedures across the operational spectrum.

ARMY NATIONAL GUARD AVIATION DEPOT MAINTENANCE ROUNDOUT UNITS (ADMRUs)—

PREPARED, RESPONSIVE, and PRODUCTIVE

Colonel Ron Eaton
Commander
Mobilization ARNG AVCRAD Control Element
Maryland Army National Guard (MDARNG)

Force structure changes will challenge the management skills, imagination, and resourcefulness of aviation soldiers well into the future. Preparation, responsiveness, and productivity are, and will be, essential to mission success. Army National Guard (ARNG) Aviation Depot Maintenance Roundout Units (ADMRUs) have taken, and will continue to take, the business seriously.

The ADMRU Program consists of four ARNG Aviation Classification and Repair Activity Depots (AVCRADs) and the Mobilization AVCRAD Control Element. Located in Calif., Conn., Miss., Mo., and Md., these units have their origin in transportation aircraft repair shops (TARSs); they have been missioned to support the ARNG aviation fleet in peacetime. Over 1,300 ARNG soldiers are organized to augment the mobilization capabilities of Army aviation. All units have sustained assigned strengths exceeding 100 percent and military occupational speciality (MOS) qualifications above 85 percent for 15 years. Units are capable of performing up to "limited depot" maintenance on all modernized aircraft and have a demonstrated ability to task organize and support operational deployments.

The ARNG has invested in human and equipment capital that has earned significant dividends for the Guard's peacetime aviation maintenance mission. The Army recognized that these investments could benefit Army aviation in time of war. In October of 1979, the TARSs were reorganized into ADMRUs. Units were aligned under the U.S. Army Materiel Command (AMC) as mobilization assets. AMC then tasked the U.S. Army Depot Systems Command (DESCOM) to serve as the executive agent for pre-mobilization plans, programs, training, and evaluation. Command and control transfers from the respective State Adjutant General to DESCOM on mobilization.

DESCOM has assigned four mission essential tasks:

- Support/Expand continental United States (CONUS) aviation depot maintenance.
- Provide an outside CONUS (OCONUS) aviation maintenance capability.
- Support deploying aviation Strategic Defensive Forces (SDFs).
- Classify and return B-17 stocks to the wholesale system.

The first task uses, on an average, 18 years of journeyman-level aircraft maintenance experience. This experience also can be projected to provide an OCONUS maintenance capability consistent with warfighting requirements. Deployment of the CT-AVCRAD for Desert Shield/Storm and a task-organized team to Somalia in 1994 demonstrated the OCONUS capability.

As a productivity step, units train to deliver a product. The SDF mission has provided such as opportunity. The importance of SDF recently was recognized in two documents originated by the U.S. Army Aviation and Troop Command (ATCOM), AMC, and the U.S. Army Forces Command (FORSCOM). ATCOM provided worldwide guidance on aviation SDF for shrink wrapping of aircraft, assigning leadership on this issue to the ADMRUs. This was a direct result of support provided to the deployment of the 10th Mountain Division (Div),(Light), Fort Drum, N.Y., to Somalia. In 1993, FORSCOM and AMC signed a joint memorandum of agreement outlining access and use of the ADMRUs for support to deploying FORSCOM aviation forces during mobilization.

ADMRU soldiers have supported numerous deploying aviation units with port operations, maintenance, and logistics air, using the C-23 Sherpas. In 1993 the ADMRUs, principally the Conn. AVCRAD, supported deployment of the aviation assets of the 10th Mountain Div to Somalia. Within 72 hours of the alert, ADMRU soldiers had organized and relocated to Motby, N.J. Thirty-one modernized aircraft then were received, secured, preserved, blade-taped, shrink wrapped, rigged, loaded, and lashed for sea movement to Somalia. Moreover, assigned C-23s supported the return of 10th Mountain Div soldiers to Fort Drum immediately upon landing at Motby Air Base, saving time and providing precious family and unit time to the soldiers just before an operational deployment. Later ADMRUs deployed to Somalia to assist in redeploying assets to CONUS.

Other SDF missions have found ADMRU soldiers working to support the 24th Infantry Div (Mech), Fort Stewart, Ga.; 101st Airborne Div (Air Assault), Fort Campbell, Ky.; and the 82d Airborne Div, Fort Bragg, N.C. Bright Star and Ocean Venture, Operation Market Square, and Dragon Team are but a few of ADMRU-supported exercises. Most recently, ADMRUs supported the XVIII Airborne Corps, Fort Bragg, N.C., and the Seventh Transportation Group, Fort Eustis, Va., in the Joint Logistics Over The Shore (J-LOTS) exercise that examined shallow port operations.

CTAVCRAD soldiers begin preparing 10th Mountain Division UH–60 Black Hawks for sea movement to Somalia at Motby Air Base, N.J.

During Ocean Venture 93, ADMRU soldiers supported the sea movement and self-deployment of aircraft from the 101st Div. Thirty-six modernized aircraft were wrapped and loaded at JAX-Port, Fla. C-23 aircrews flew in excess of 32,000 miles, providing flight watch during overwater operations, logistics air maintenance support, and movement of flight crews to and from Fort Campbell.

While supporting these important exercises and operational deployments, other task-organized ADMRU soldiers provided aviation materiel classification support to the Defense Logistics Agency (DLA) along with appropriate ATCOM item managers. Traditional ARNG soldiers have, in less than 3 years, classified nearly 57,000 B-17 items valued at over $1.6 billion. In 1994, classification of aviation material at Tooele, Utah, and Corpus Christi, Tex., Army depots resulted in a savings of over $4 million. This mission provides tangible benefits through the recovery of improperly coded materiel and its return to the wholesale system. The mission provides a product through planned training events.

To move maintenance and materiel management into the 21st century, ADMRU soldiers have developed an information management system. The system addresses maintenance work, loading, manpower, supply activities, and depot-level reparables. Though some work remains, this program is all but complete. Traditional guardsmen and women, most of whom hold significant civilian information/automation management job responsibilities have carried out this program. DESCOM is adapting the system for two OCONUS depot activities. This system has been another area of mutual productivity and benefit to the ARNG and Army aviation.

ADMRU soldiers have sustained a standard of excellence in all missions. They are competitive, intensely skilled in aircraft maintenance, and professionally competent. These attributes continue to serve the ARNG aviation peacetime requirements. Equally important, ADMRU soldiers are prepared on a moment's notice to support deploying and deployed Army aviation units throughout the world.

CH–47 Chinook off-loading in the J-LOTS exercise supported by ADMRU soldiers.

MOAVCRAD nearly completed with loading of a 101st Div AH–64 Apache in JAX–Port, Fla.

An AATDS MESA Apache Training Specialist employs the Tactical Display Unit to describe the tactical situation for observers at the Orlando I/ITSEC conference.

ARNG Apache Pilots Networked for Battle

Major Jack Ogle
S–3, 1–285th Aviation
Arizona National Guard (AZARNG)

More than 20 companies took part in a demonstration of Distributed Interactive Simulation (DIS) at the annual Interservice/Industry Training Systems and Education Conference (I/ITSEC) in Orlando, Fla., 28 November through 1 December 1994. Over 50 different simulation devices from around the world were networked to fight together on the same battlefield, including helicopters, fighter/attack jets, and armored vehicles.

AH-64 Apache pilots from 1-285th Aviation, Arizona Army National Guard (AZARNG), and 1–111th Aviation, Florida Army National Guard (FLARNG), manned five AH–64 Apache simulation devices during the networking demonstrations in Mesa, Ariz., and Orlando.

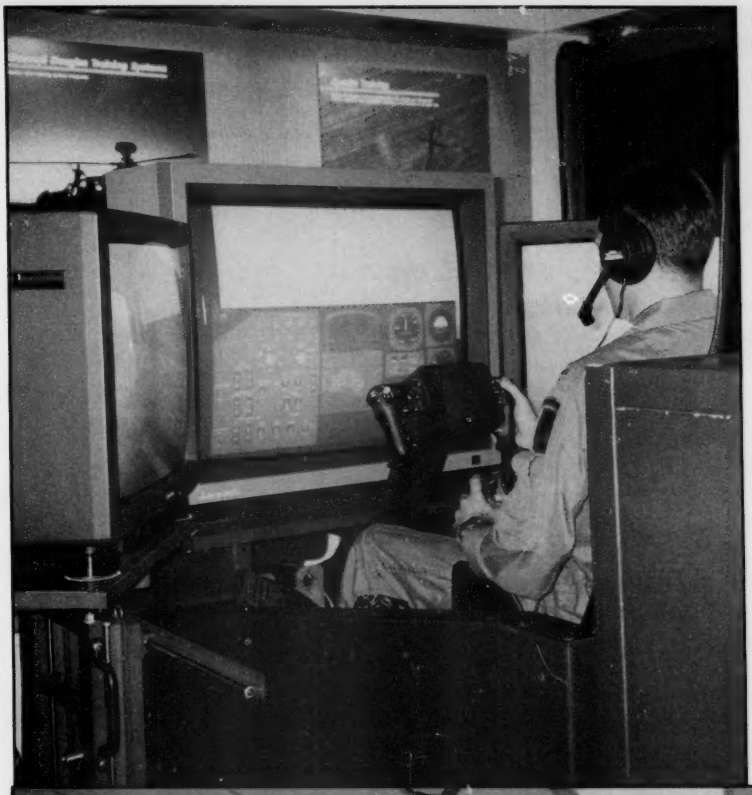
The DIS demonstration consisted of several scenarios: a helicopter armed reconnaissance demonstration (AH–64 Apache helicopters verses enemy tanks); a joint air attack team (JAAT) training exercise that brought aviation capabilities of all four services to bear to support ground troops who were tasked to seize an airfield; and a land battle scenario that involved all of the DIS players at I/ITSEC.

The AH–64 stations were manned by National Guard warfighters. The ARNG sent crew gunnery–qualified Apache pilots from two of its seven combat–certified AH–64 battalions to fly the flight simulators at the McDonnell Douglas Training Systems (MDTS) facility in Mesa, and on the conference floor at Orlando, for the duration of the conference. Also linked to the battlefield was the AH–64 combat mission simulator (CMS) from Fort Rucker, Ala., flown by U.S. Army Aviation Center pilots.

MDTS DIS demonstration players at I/ITSEC included F/A–18C Hornet and F–15E Strike Eagle simulators and an AH–64A Apache Player Station in the copilot–gunner configuration. A full–fidelity, dual–cockpit Apache Crew Trainer (ACT) and three Apache Player Stations at MDTS' Mesa facility also took part in the DIS demonstration by long haul network.

For the JAAT scenario, the USAF F–15E provided initial suppression of enemy air defenses (SEAD); the AH–64A provided laser target designation and terminal control to the strike aircraft. The F/A–18C employed heavy ordnance (laser–guided bombs) to take out the hardened target designated by the AH–64 Apaches.

For the antiarmor demonstration, the Apache Player Station at Orlando and the Apache Crew Trainer and Player Stations at Mesa networked together to operate as a company–size task force on the simulation battlefield. The company task force joined together as a flight and moved into pre–planned battle positions. Targets were acquired and the fire distribution plan was executed. Target engagements went



quickly in the target–rich environment, with remote and autonomous Hellfire shots. Players lased for each other, whether across the room or across the country.

The remaining air defenses were stripped from the enemy force, followed by their command vehicles. National Guard Apache pilots at the Apache Player Stations communicated and coordinated over the network to destroy the remaining enemy forces.

The battle took place on the data base, indoors in several States. In spite of this, our ARNG warriors had their "heads in the game," pulse rates were high, and battle rhythm was ever present.

Simulated Joint/Combined Army battles are an inexpensive and valuable training vehicle for cavalry/attack units.

AZARNG Apache pilots in Mesa, Ariz., join with FLARNG Apache pilots at Orlando, Fla., in the networked battle to fight as a company–sized task force.

Multi-Service Team Works Sub-Saharan Biodiversity Program

(Supporting Aerial Surveillance Training in Africa)

Major James E. Braman
Flight Training Division Chief
CW4 William N. Page
OH-58 Standardization Instructor Pilot,
Western ARNG Aviation Training Site, Marana, Arizona

The Western ARNG Aviation Training Site (WAATS), Marana, Ariz., deployed five instructor pilots (IPs) last year to Africa to support a Sub–Saharan Biodivirsity Program.

The program provides an antipoaching capability to the nations of Zimbabwe, Namibia, Botswana, and Mali. The Department of the Navy International Programs Office executes the program.

The Naval Education and Training Security Assistance Field Activity formed a mobile training team (MTT) to introduce the forward–looking infrared (FLIR)–equipped O–2A Skymaster aircraft to the various nations. The team was comprised of three aircraft IPs, one maintenance instructor, and one aerial surveillance IP. The Navy, the Army, and the Air and Army National Guard (ARNG) provided personnel with these technical skills on a rotation basis over a 12–month period.

The Navy Air Systems Command provided the aircraft and systems. The Army Electronic Proving Ground Flight Detachment provided oversight of the aircraft renovations at Fort Huachuca, Ariz. The MTT instructors flew the aircraft to the east coast. The aircraft then were self–deployed by contract pilots to Africa.

The MTT's mission was to introduce the O–2A aircraft into the military organizations designated by the host nations. The MTT did this by conducting several phases of training. Aircraft transition training was provided to experienced fixed–wing pilots. Organizational maintenance training was provided to support personnel along with supply support procedures. Mission training was provided to pilots and designated observers to support the host nation program objectives.

The Western AATS aerial surveillance instructors trained the MTT O–2A aircraft IPs to operate and use the FLIR from OH–58 Kiowa aircraft located in Marana. These techniques were adapted to the O–2A airplane and taught as part of the training program in Africa.

The Western AATS aerial surveillance instructors also taught operation of global positioning system (GPS) navigation equipment and high–frequency (HF) radios, mission planning, cross–country navigation, night vision techniques, safety considerations, and crew coordination skills. The instructors integrated all these skills into comprehensive mission briefs.

Each deployment lasted from 5 to 7 weeks. The Western AATS IPs developed all the lesson plans and presentation materials needed to conduct their training. Also they conducted inflight instruction on use of the FLIR to the host nation pilots and designated observers.

The most challenging aspect of the program was teaching FLIR surveillance techniques at night to pilots whose primary experience was flying in day visual flight rules (VFR) conditions. The pilots had to develop the essential crew coordination skills required for the safe night–time operation of the aircraft. They also had to tactically use the FLIR to locate poachers to support police forces on the ground.

The remote locations, associated lack of ambient light sources, and lack of a visible horizon required the use of flight instruments to maintain situational awareness. Although recommended by the Western AATS, night vision devices were not available for the mission. Pilots of the host nations using the FLIR had to greatly improve their night instrument flying skills before they could complete their mission training. This became the most significant lesson learned during the first tactical training phase.

A radar altimeter was added to the aircraft and changes were made in the location of some of the mission equipment in the cockpit to enhance the use of night instrument flying skills and improve crew coordination.

Successful completion of the program can be directly attributed to the spirit of cooperation and professionalism displayed by all the team members who worked on this important antipoaching effort. The OH–58 IPs from the Western AATS; the Western Flight Standardization Branch (Directorate of Evaluation and Standardization (DES), Marana; and the High–Altitude Training Site, Eagle County, Colo., played a critical part on this joint service team providing specialized skills.

The significant contribution of the ARNG demonstrates again our ability to respond rapidly to an overseas deployment requirement and successfully complete the mission.

A NEW BREED OF WARRIOR

Colonel James L. Jones (Ret.)
Mississippi National Guard (MSARNG),
Public Affairs

The newest weapon in the Mississippi National Guard (MSARNG) inventory—the OH–58D Kiowa Warrior helicopter—takes its name from a proud and fierce race. The Kiowa Indians once were among the most feared and warlike of the Indians of the American Plains. They were fierce and unrelenting in warfare against both fellow Indians and the white man, who began moving onto the territory of the Indians in the 1800s. The U.S. Army did not completely conquer them, but they were eventually brought into submission by attrition and the loss of their arms and horses.

Tradition and historical evidence place the beginnings of the Kiowa Indians in the Montana mountains at the headwaters of the Missouri River. At the end of the 1700s, the Kiowa migrated southward to the Arkansas River and, thereafter, occupied the plains eastward of northern New Mexico. They were believed to have always been hunters, but they did not develop their reputations as skilled hunters and warriors until introduced to the horse.

During the early 1800s, the Kiowa waged war against other Indian tribes, but turned their wrath on the white man who began moving westward and encroaching on their buffalo hunting grounds. Of the horse Indians, the Kiowa had the most horses and were foremost in possessing the character traits associated with the horse—bravery and audacity.

Bell Helicopter Textron, Inc., manufactures the Kiowa Warrior helicopter. In developing this helicopter, Bell acknowledged the bravery and audacity of the Kiowa Indians by adding a powerful array of weaponry to what was already an advanced scout helicopter. The armed OH–58D can carry the following weapon suites: four Hellfire missiles, four Stinger missiles, two seven–round rocket pods, one 50–caliber machinegun, or a mixture of any two.

The OH–58D helicopter first was deployed for action during Operation Desert Storm and took part in a wide variety of combat missions. This agile, versatile aircraft, with its complete day, night, and adverse weather conditions capability, extends the conventional warfighting response of military units equipped with the armed OH–58D.

Bell modified Army OH–58Ds to the armed configuration in 1987 to 88. Some 15 armed OH–58D helicopters were shipped to the Persian Gulf, where they were based on Navy vessels, protecting the vital sea lanes. To date, 128 Kiowa Warriors have been delivered to the U.S. Army, including the complement allocated to the MSARNG.

The new Kiowas belong to the 1st Battalion, 185th Aviation, Tupelo, Miss., which recently became the first ARNG unit in the nation to receive the most versatile, integrated armed reconnaissance helicopter system in production. The OH–58D officially was received in the MSARNG at a ceremony in Tupelo, which drew Department of Defense, National Guard Bureau, and MSARNG leaders, together with local citizens, to witness the event. The unit will have 15 Kiowa Warriors based at Tupelo to train for a new wartime mission.

"National Guard Aviation is on the cutting edge of technology, and we have high hopes for the 185th," Major General (MG) John R. D'Araujo Jr., Director of the Army National Guard, told several hundred participants at the Tupelo ceremony.

MG Dewitt T. Irby, a native Mississippian and the U.S. Army's Program Executive Officer for Aviation, said, "We are looking to you soldiers to be the bridge that gets us to future technology."

Also joining MG James H. Garner, Adjutant General of Mississippi, for the welcoming ceremony were Lieutenant General William H. Forster, Military Deputy to the Assistant Secretary of the Army and a Mississippi native, and Mayor Jack Marshall.

So, the MSARNG's 1st Battalion, 185th Aviation, enters a new era of Army aviation with a sophisticated, versatile aircraft, bearing the name of an ancient warrior who forever wrote his name and deeds into American history.

SCARNG OH–58, AH–64, and UH–60 awaiting loading on a C–5A at McEntire ANG Base, Eastover, S.C.

Apache Force Deployment—South Carolina Style

Lieutenant Colonel Mark V. Rhett
Headquarters (Det 1) State Area Command and
Staff Sergeant Danny Brazell
108th Public Affairs Detachment
South Carolina Army National Guard (SCARNG)

To paraphrase a famous American Civil War general—the key to victory in combat is getting to the battlefield the "first–est with the most–est."

The 1st Battalion, 151st Aviation (Advanced Attack–Helicopter), SCARNG, believes the general may have been right. The AH64 Apache attack helicopter unit also believes a quick response could be the key to victory. That is why the unit places as much emphasis on its deployment methods and techniques as any ARNG unit in the country.

During the past 2 years, the battalion has conducted five deployment training exercises using just about every mode of transportation available: air, sea, and rail facilities.

A major reason the unit has decided deployment and loadout exercises deserve a proper amount of training time is that an Apache attack helicopter battalion can confront the enemy with the equivalent firepower of an armored brigade. However a military transport airplane, such as the C–5A Galaxy, can carry to the battlefront only one M–1 Abrams tank, while it can carry six Apache helicopters.

Delivering the Apache to the battlefront is quicker and less expensive. The explosive firepower of the attack helicopter is available almost by the time the cargo ramp of the C–5A is lowered.

The 151st began its loadout training in 1990 with a joint-deployment exercise involving Canadian forces. Since then, the unit has conducted an extensive number of C–5 loadout exercises to rival any Apache unit.

Each of the deployment exercises, which are conducted above and beyond the members' normal individual weekend drill time, has involved one or more of the battalion's five companies, and has been specifically designed to introduce the battalion's personnel to the complexities of tactical deployment.

One of the principal selling points of the loadout exercises for the 151st is that the exercises can be done at its homebase at McEntire Air National Guard (ANG) Base, Eastover, S.C. For example, in July 1993, the unit prepared and loaded five AH–64 Apaches in the C–5A parked on a runway at the airbase, flew to McDill Air Force Base, Tampa, Fla.; unloaded the equipment; took part in a livefire exercise; reloaded the next day; and redeployed to McEntire.

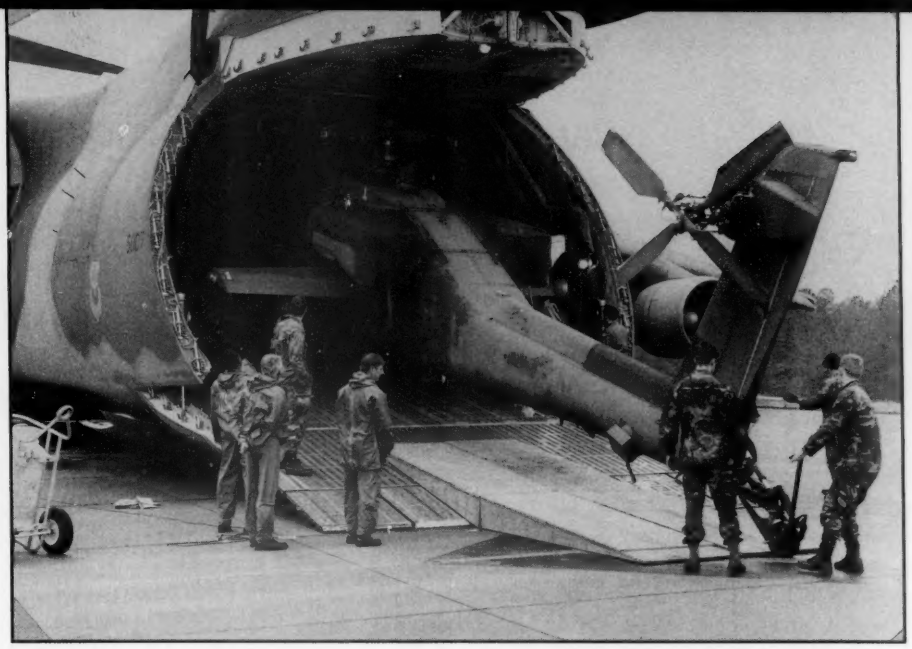
The unit did the same thing this summer when it flew members of B and D companies to Dover, Del.; loaded the C–5A with three AH–64s, one OH–58 Kiowa, and one UH–60 Black Hawk; and redeployed to McEntire ANG Base. While at Dover, the unit members trained some full-time U.S. Air Force personnel in the loading techniques.

The fact that the unit has the capability to do this type of rapid and cost-effective deployment operation "in its own backyard" is a point it is trying to make to the Pentagon.

Presently, the 151st must move its equipment to Fort Bragg, N.C., for mobilization. This requirement may be unnecessary, based on the effectiveness of the units deployment exercises.

Most of the deployment exercises, which can sometimes require up to 2 months of planning, have involved loading the unit's equipment on C–5As. But this year the battalion conducted an exercise in Jacksonville, Fla., where its Apaches were onloaded to a surface cargo ship.

Such training exposes the 1–151st Aviation to a variety of deployment options. Also it helps the battalion develop the necessary familiarity, and working cohesion, with other military and civilian loading units.



SCARNG AH–64 being loaded on a C–5A out of Dover, Del.; note wooden ramps.

The 151st's emphasis on loadout training has paid dividends. Based on the edict that practice makes perfect, the unit can now load the equipment of one of its companies on a C–5A transport in about 2 hours. Combine that fact with the unit's logistical ability to work "in its own backyard" and you understand why the 151st gives such credence to its motto, "Ready to Strike."

UH–60 and M882 from 1/151st SCARNG after loading on a C–5A at McEntire ANG Base, Eastover, S.C.

ARNG AVIATION SUPPORTS NATO CPX

Major James Mulvehill
S–1, 419th Aviation Group (ATK)
Florida Army National Guard (FLARNG)

The Allied Command Europe (ACE) Rapid Reaction Corps (ARRC), under the control of Headquarters, Baltic Approaches, conducted a multiphased command post exercise (CPX) during the month of October 1994. The ARRC, a multinational Corps–size force, is organized to react quickly to counter hostile forces threatening the ACE area of responsibility. The Corps is highly mobile, equipped with extremely effective and modern weapons systems, and able to definitively effect a large opposing force quickly and decisively. The ARRC was formed in 1992. The exercise conducted in October was its first opportunity to work together as a unit.

The primary phases of the exercise, Operation Arcade Fusion and Operation Chinese Eye, were designed to help train the ARRC Headquarters command and staff elements. Operation Arcade Fusion was conducted first, and exercised the ARRC's ability to alert and deploy designated ARRC forces (division level) into a concentration area. On this particular exercise, the area of operations was situated in Northern Germany, just below the country of Denmark. The drill tested the ability of the ARRC to plan and conduct the deployment of its forces from multiple locations in Europe into a strategic site to prepare for combat operations.

Operation Chinese Eye, Phase II of the CPX, focused on employing the forces of the ARRC against an invading enemy from the north into Denmark. The exercise allowed the ARRC staff to conduct the planning and employment of its forces in close, deep, and rear battle areas. It emphasized proper command and control of combat, combat support, and combat service support forces.

The forces represented during Chinese Eye are listed below:

- 7th German (GE) Panzer Division.
- 1st United Kingdom (UK) Division.
- 3d Italian Infantry Division.
- Multinational Division (Central).
- 15th U.S. Aviation Bde (Corps).
- Corps Support Troops (Multinational) Air Defense Artillery (ADA), Artillery (ARTY), Engineers (ENG), Air Force, Psychological Operations (PYSOPS).

ARRC controller/players follow Corps deployment forward.

The U.S. Army National Guard (ARNG) was asked to take part in the Corps–level CPX, and played a key role in the train up of the ARRC staff. HQ, ARRC, through the U.S. Army Forces Command, solicited the Army National Guard to provide a team of experts in Corps–level, AH–64 Apache deep operations to

Multinational staff plans division defensive operations.

operate as part of a larger exercise control team. ARNG selected and sent four AH–64–qualified officers from the 1–151st (S.C.) and 1–111th (Fla.) Apache battalions as members of the team. These two ARNG attack battalions completed the Department of the Army, Office of the Deputy Chief of Staff for Operations and Plans, fielding program and were certified as combat–ready by the Army in 1989 and 1990, respectively. The officers, all former or current attack helicopter company commanders, had extensive background and staff time in planning and executing deep operations at the Corps level.

The team served in a player/controller capacity. Their mission was to ensure the ARRC staff's proper employment of attack and lift helicopters. They synchronized all the assets available to ensure successful aviation employment. The team conducted 24–hour operations as a Corps Aviation Brigade and reacted to operation orders, fragmentary orders, and warning orders from the ARRC staff. They also acted as honest brokers, ensuring that realism was maintained within the exercise play. They required the ARRC staff to employ aviation assets legitimately. Every 12 hours the controllers from each of the represented units took part in an afteraction review. This created tremendous opportunities to many valuable lessons learned throughout the exercise. In most cases, lessons learned were transmitted to the ARRC immediately, allowing the staff to benefit from any criticism noted.

The ARRC and U.S. Aviation Team developed a deep operations assessment matrix that gave the Corps commander another tool to assess the specific factors associated with a certain high–risk deep operation. The factors included criteria that may or may not be able to be effected by the Corps. These included distance, surprise, weather, and intelligence of the target. Other factors used on the matrix during deep operations planning and execution were electronic warfare (EW), ADA, ARTY, air interdiction (AI), Joint Suppression of Enemy Air Defense (J–SEAD), and Army Aviation aircraft survivability. Fighter management, airspace management, and logistical support also were realistically considered during the planning and execution phases.

The ARRC Headquarters and U.S. Aviation Team worked together applying sound doctrine to the planning and execution of deep and close attack helicopter operations against conventional and nonconventional high–risk, high–payoff targets. The Corps developed a deep operations cell and conducted liaison with the Aviation Brigade during the long–term planning and targeting of enemy forces within the Corps commander's Area of Interest. The Aviation Brigade worked with the ARRC deep operations cell throughout the decision cycle process.

Pakistani aircraft mechanics receiving training on AH–1 aircraft systems.

Projecting Aviation Training to Somalia

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Western ARNG Aviation Training Site
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The Western ARNG Aviation Training Site (WAATS), Marana, Ariz., organized an aviation mobile training team (MTT) to support the United Nations' effort in Somalia. Through this technical qualification training, the Pakistani Army was able to assume the ready reaction force mission under the United Nations Command when the U.S. forces left Somalia at the end of March 1994.

The AH-1S Cobra MTT was comprised of 13 soldiers from Ariz., Ark., Conn., and Iowa. The MTT conducted AH-1F to AH-1S transition training for aviators, aircraft mechanics, and armament technicians of the Pakistani 33d Army Aviation Combat Squadron. The team trained a total of 45 Pakistani soldiers in Mogadishu, Somalia, from 7 to 17 March 1994.

The team had less than 2 weeks to prepare for the mission before a two-man advanced team deployed from Arizona on 20 February 1994. The remainder of the team deployed from their home States 2 days later with a stop at Fort Dix, N.J., for mobilization training and processing.

A significant challenge to organize the team from four widely separated geographic areas was met by careful planning and networking with the ARNG's Readiness Center, Arlington, Va. The majority of premobilization requirements was completed at each team member's home State using the dedicated ARNG resources located there. This collective effort coordinated across the nation allowed the team to focus on the detailed planning needed to execute the mission. The team recommended the timing of the training and associated arrival of the aircraft, ammunition, and the Pakistani students to the U.S. Army Aviation and Troop Command (ATCOM), the Security Assistance Management Organization, and the Joint Task Force in Somalia.

Upon arrival in Somalia, the MTT in-

Pakistani aircraft mechanics and student pilot preparing the AH–1 aircraft for flight.

Pakistani armament mechanics receiving training on loading the 40mm grenade launcher.

Pakistani armament mechanics receiving training on the M34 machinegun.

ventoried aircraft, test flew aircraft, and fired the munitions on the AH-1S helicopters the United States released to the United Nations. The aircraft came from the Hawaii ARNG and were reconditioned by ATCOM before deployment. The MTT also maintained the aircraft until the students received enough instruction to conduct the maintenance adjunct to the training they were receiving. The first week in country also was used to coordinate use of the gunnery ranges, set up classroom facilities, and complete local orientation flights for all instructor pilots (IPs) and the MTT chief

The training phase lasted 10 days. It resulted in qualifying six aviators, two of which were IPs and one a maintenance test pilot (MTP); an additional three aviators completed the academic requirements. Also 27 aircraft mechanics and 12 armament mechanics were qualified in unit level maintenance. The MTT worked together well to implement the plan, which required careful timing of the classes held in the morning for the aircraft mechanics, armament mechanics, and aviators, and flight training in the afternoon for the aviators.

The first four aircraft shipped from the Hawaii ARNG were used for training. Four more aircraft arrived in Mogadishu during the last week of training. This gave the United Nations a total of eight AH-1S aircraft configured with two rocket launcher pods on each wing and the M28 turret system to perform their mission. The entire team departed Somalia on 19 March 1994 after successfully completing the mission.

The MTT was task organized with a major as the team leader and three sections. The flight training section had five IPs. The maintenance training section had an MTP, a maintenance officer, and one mechanic. The armament training section had four armament mechanics. Each team member had more duties assigned to assure all required functional responsibilities were covered for a safe, effective operation.

Each aircraft on every training flight carried a basic load of minigun ammunition, 40mm high-explosive (HE) grenades, and HE rockets to provide a comfortable level of protection for the crew. The training consumed about 45,000 gallons of fuel; 60,000 rounds of 7.62mm ball ammunition; 3,200 rounds of HE 40mm; 275 HE 70mm rockets; and about 75 hours of flight time.

One critical lesson learned from this mission was coordination must be completed early in the planning process among the unit receiving the training, the MTT, and the lead U.S. Government agency responsible for the mission. Bringing an MTT into the planning process 2 weeks before deployment causes unnecessary crisis management. The MTT will state the plan the lead agency developed, without the MTT's experience, will likely fail because critical resource requirements were overlooked or the timing of events was not synchronized with the sequence of training.

The success of this operation was based on—

. The excellent cooperation provided by the Joint Task Force in Somalia.

. The efforts of support personnel that assisted with the deployment.

. The dedication and professionalism of the members of the MTT.

Completion of this mission demonstrates again the accessibility and readiness of the ARNG. It proves our ability to deploy to a hostile fire area and successfully train foreign troops.

449th Aviation Group Deployment to Germany for Atlantic Resolve '94

SFC Douglas G. Wade
449th Aviation Group (ATK)
North Carolina Army National Guard (NCARNG)

On 24 October 1994, 10 members of the 449th Aviation (Avn) Group (Gp) departed the Raleigh–Durham Airport, N.C., for overseas deployment training (ODT) in Germany (GE). The ODT cell, consisting of two officers, one warrant officer, and seven enlisted soldiers, landed at Rhine Main Air Force Base in Frankfurt, GE, on 25 October 1994. After spending the night at the Abrams Center in Frankfurt, we reported for duty with our host unit, the 11th Avn Regiment (Regt) at the Grafenwoehr training area, Camp Aachen.

We were to take part in the computer assisted exercise (CAX), Atlantic Resolve '94, which replaced REFORGER this year. Our mission was to integrate with the 11th Avn Regt at the Combined Land Component Command (CLCC), V Corps deep planning cell. The multinational effort involved GE, France (FR), the United Kingdom (UK), and the Netherlands (NE).

For national play, the operation took place on the island of Atlantis in response to civil unrest between North and South Titania. South Titania had requested and received assistance from the North Atlantic Treaty Organization in a dispute with the North over an area, claimed by both sides, called Maleva. Operations on Atlantis consisted of deterrence through Operations Other Than War and transition to the Warfighter CAX.

One of the most intriguing aspects of the operation was how maps were prepared, using FR as the island of Atlantis. Topographers cut FR away from Europe, transforming it into an island and changing most of the names of the cities and towns.

The 11th Avn Regt mission was to execute deep operations.The 449th Avn Gp ODT cell, along with personnel from the 166th Avn Regt (Army Reserve unit in GE) was integrated into its tactical operation center to assist.

The Active Component (AC) soldiers from the 11th Avn Regt were most accommodating in sharing information and responsibilities. During the exercise our soldiers, working in intelligence and operations vans, received the latest equipment and training the Army had to offer. This type training, though narrow in scope, is invaluable in bringing the Reserve and ACs together to prepare them for a future that promises a much closer relationship. A few members of the ODT cell worked as liaison officers between the FR (7th Armored Division) and the NE 101st Brigade (Mechanized). We will not forget this experience soon.

We had lunch and dinner with both the French and Dutch, and were envious of their dining habits. When the Warfighter CAX started sleep became a luxury. The NE and FR were anxious to use our AH–64 Apaches to stop the North Titanian advance. During the CAX, a battalion of AH–64s were OPCON'd to both the NE and FR. After a crash course on tactics provided by Lieutenant Colonel L.A. Mauro, 449th executive officer, the AH–64s were employed successfully. The AH–64, with its night–fighting capabilities, proved once again its supremacy on the modern battlefield. When all the battle damage assessment was tallied, the AH–64 had accounted for as much damage as all other weapon systems combined.

After completion the Warfighter CAX, the 11th Avn Regt presented unit coins and certificates of achievement to all members of the 449th ODT cell. We were all ready for some much deserved rest, but realized we had just received the best training possible without having to deploy for the "real thing." We appreciated the 11th Avn Regt's motto, **"STRIKE DEEP"**!!

(Continued from page 2)

domestic disturbance and natural or man–made disaster. Reducing our size is not as simple as removing "X" utility or cargo helicopter units from "Y" states until you make the numbers work. Careful consideration has to be given to not only how many of one type of unit that the National Guard retains but also where those units are to be located. For example, it is unacceptable to leave a state without benefit of utility aircraft. While the AH–1 Cobras and AH–64 Apaches are great aircraft, one cannot execute disaster–relief operations with them.

We also must be careful in minimizing the loss of one of our greatest assets: our aviation maintenance capability. The ARNG has wisely invested in infrastructure and manpower to support its readiness requirements. While the Army can expand the total aviation fleet relatively quickly, we in the ARNG cannot expand the maintenance of that fleet if we allow a great erosion of the efficiency that years of hands–on experience have developed. For that reason, the ARNG continues to look for ways to maintain our edge in providing a quickly expanding aviation maintenance capability.

Another of our great concerns in this mass of change is the availability of modern aircraft to ARNG aviation units. Current plans show the ARNG operating more than 600 UH–1 Iroquois "Huey" helicopters and about 400 UH–60 Black Hawks in the year 2001. If we are to meet wartime mission requirements, this imbalance must be corrected.

We at the Aviation Directorate of the National Guard Bureau have had to undergo a fundamental shift in how we manage and provide resources for Army National Guard aviation. The models we used two years ago are now broken up and scattered. In their place are new ideas, new ways of viewing old problems, and most importantly, new optimism about our future. We will make this change work. We will not be satisfied with simply being managers of change.

We will lead change and our aviation force into the twenty–first century.

The Winds of Change

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The Army National Guard (ARNG) began evolving in fiscal year (FY) 1995 under the Aviation Restructure Initiative (ARI).

The ARNG will complete most of the organizational changes by the end of FY 1996. It will convert 8 division aviation brigades (1 light, 3 standard, and 4 heavy), 1 theater aviation battalion, 3 corps aviation groups, 5 AH–64 Apache battalions, 19 aeromedical companies, and units allocated to Northeast/Southwest Asian theaters to the ARI design by the close of FY 1996. The only units not converting by FY 1996 will be 4 AH–64 battalions and the division aviation support battalions (DASBs). These organizations will convert later.

The Reserve Component General Officer Offsite (RCOS) agreement, 10 December 1993, emphasizes the importance of this reorganization. This agreement realigned Reserve Component missions, causing the migration of 77 percent of the U.S. Army Reserve (USAR) aviation force to the ARNG. Migration of the USAR force to the ARNG will be completed by the end of FY 1996. This consolidation of National Guard and USAR aviation will result in an aviation force responsive to mobilization and peacetime domestic requirements.

The RCOS agreement was necessary to meet overall force reduction objectives while retaining readiness. It will result in a shared reduction of about 8,000 Reserve and ARNG aviation personnel from the force. The ARNG and the U.S. Army Reserve Command (USARC) are working together to implement the aviation migration while retaining the most qualified aviation soldiers.

ARNG aviation also is internally realigning force structure. Meanwhile, ARNG aviation is maintaining mobilization preparedness and providing maximum coverage to state domestic needs. Implementing ARI, the RCOS, and internal ARNG realignment at the same time will affect every soldier in Reserve Component (ARNG/USAR) aviation.

The certain result of this ambitious effort will be retention of the most qualified, trained, accessible, and resource–efficient Reserve Component aviation force. By combining the best ARNG and USAR aviation soldiers, the United States will have the highest quality, most proficient, and most readily deployable Army aviation force ever. This force will be ready and able to respond to national and international crises across the operational continuum.

Making It Happen—Operations with Nonmodernized Aircraft

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Commander
MAJ Timothy J. Edens
Squadron S3
CW4 Raymond L. Watson
Squadron Standardization Officer
4th Squadron, 9th Cavalry Regiment, 6th Infantry Division (Light)*
Fort Wainwright, Alaska

Today's Army is the most technologically advanced fighting force ever fielded by any nation. Army aviation units with AH–64 Apaches, OH–58D Kiowas, and UH–60 Black Hawks have unprecedented capabilities to move, fight, and sustain operations. Battle tested and proven during Desert Shield and Desert Storm, these capabilities were optimized under cover of darkness. This allowed our aviation forces to capitalize on two time–tested principles of war: security and surprise. No one today doubts that Army aviation "owns the night."

But what about units equipped with the AH–1 Cobras, OH–58 Kiowas, and UH–1 Iroquois "Hueys" that do not have the "system–enhanced" capabilities of our more advanced aircraft? Our unit—the 4th Squadron, 9th Cavalry Regiment, 6th Infantry Division (Light), Fort Wainwright, Alaska—faced such a challenge when we participated in an exercise at the Joint Readiness Training Center (JRTC) at Fort Polk, La., in 1993. Our mission essential task list (METL) required that we conduct security operations for the division. By definition, these operations must be conducted 24 hours a day. Doctrinally, in the past, we have relied on ground troops to provide night security because of the lack of thermal capabilities in the air troops. Our modification table of organization and equipment (MTOE) did provide us with aviator's night visions imaging system (ANVIS–6) night vision goggles (NVG), which greatly increased our ability to maneuver at night. But maneuvering and accomplishing critical tasks required during security operations are two different things. Moving at night requires (relatively speaking) seeing and avoiding hazards to terrain flight. Establishing a screen line of aerial scouts protected by attack helicopters falls into this relatively simple task area. But the aerial scouts and attack crews require capabilities that NVG cannot provide when performing their crucial mission of detecting, reporting, tracking, and when necessary, destroying enemy reconnaissance forces (counterreconnaissance battle) or, with augmentation, performing guard or economy–of–force missions.

Add to these challenges, JRTC's densely vegetated terrain and dismounted, guerrilla–style opposing forces (OPFOR) to the equation, and we find that—unlike the National Training Center at Fort Irwin, Calif., with open terrain and conventional, mounted OPFOR, affording long–range acquisition—the JRTC often requires aerial scouts to hover almost on top of the OPFOR to detect it.

This would hardly be considered a fundamentally sound method to gain and maintain enemy contact! But without organic, aerial, thermal visionics, how can we conduct effective security and reconnaissance operations from the air at night?

In September 1993, 4–9 Cavalry formed Task Force (TF) SABRE, the aviation task force supporting 2nd Brigade, 6th Infantry Division (Light)—TF MANCHU, for JRTC Rotation 94–01. This was the second rotation at the new JRTC facility at Fort Polk and provided for a full–up brigade task force with a light/heavy configuration. We faced head–on this challenge of providing 24–hour aviation support without the organic thermal acquisition capabilities necessary for true night aerial security and reconnaissance operations. Also, our task organization for this exercise did not include our ground troop from the Wisconsin National Guard.

In response to this challenge, TF SABRE troopers demonstrated a

*This division no longer exists. Questions about this article can be directed to MAJ Edens, who is a resident student at the Command and General Staff College, Fort Leavenworth, Kan., through May 1995.

trait that has always made our Army great: the ability to adapt to combat situations (or simulated combat, in this case) with equipment on hand—not bound by a mind–set of "we do not do, or have not done, things that way." Thus, the focus of this article is not to become so tethered to technology, or frustrated by the lack of it in our particular organization, that we forget how to "make it happen."

Armed with our tried–and–true old systems, the cavalry spirit, and our motto, "we can, we will," TF SABRE rolled into JRTC. The thick vegetation at Fort Polk severely degrades the ability to acquire personnel and vehicles at night using ANVIS–6 NVG, particularly if the folks you are looking for do not want to be seen. The OPFOR is expert at using cover and concealment and knows your specific capabilities and limitations. Having assessed our JRTC opponent and its turf before our arrival, TF SABRE tried to throw a wrench into the OPFOR's intelligence analysis.

We did this by employing two ground–mounted tube–launched, optically tracked, wire–guided (TOW) thermal sights from our ground troop. While still at the intermediate staging base, we trained two operators—both UH–1 crew chiefs—to operate and maintain the sights. The sights were rigged to the rear interior of our two UH–1s using a system of bungee cords, litter mounts, and safety straps made from cargo straps.

During the low–intensity conflict (LIC) phase, the UH–1, affectionately dubbed "FAT SCOUT," provided limited night reconnaissance of the squadron's trains and assembly areas (AAs) and TF MANCHU's rear area. The purpose of the reconnaissance was twofold: detect and report infiltrating guerrilla teams and provide a "proof–of–concept" phase for FAT SCOUT. Employment in this role proved quite successful, resulting in many spot reports (SPOTREPs) and calls for fire. It also assisted the commander in directing his reaction force and provided combat information on which to base possible relocation of forward arming and refueling points (FARPs) and aircraft assets. After–action reviews (AARs) later showed that the continued pressure through the night by FAT SCOUT also reduced the enemy's freedom to maneuver at night in our rear area. With this limited success, we prepared to employ FAT SCOUT in the mid–intensity conflict (MIC) phase, during which the enemy would introduce conventional forces and armor.

For this more intensive phase, our concept of employment relied heavily on thorough intelligence preparation of the battlefield (IPB). IPB, along with our newly gained experience during LIC, facilitated the templating of most likely enemy SA–14 Gremlin surface–to–air missile team locations to profile the area of operations for FAT SCOUT employment. By noting where our aircraft were being engaged and comparing that to the enemy's doctrinal employment of its systems, our Intelligence Officer (S2) was able to template enemy air defense artillery (ADA) quite accurately onto the JRTC terrain.

The new JRTC at Fort Polk provides limited aviation maneuver space within the brigade task force area of operations (AO). This same terrain, with no dominating high ground, also limits effective SA–14 employment. Our aircrews quickly learned to avoid all open areas, stay right on top of the dense vegetation, and keep moving. These techniques proved to be a trade–off, reducing our attack crews' standoff ranges but greatly enhancing survivability for FAT SCOUT, scout weapons teams (SWTs), and medium–lift and air–assault aircraft alike. These techniques, along with well–prepared and continuously updated IPB, minimized our losses to OPFOR ADA. Our final AAR showed that our aircraft had been engaged more than 70 times by SA–14s, with only one assessed kill. That kill was an OH–58 on the ground in a FARP.

Also key to mission success would be accurate battle tracking so that we knew and disseminated friendly ground–unit locations. Tracking friendly unit locations proved to be our most difficult task during the LIC phase because of the fluid nature of infantry search–and–attack (movement–to–contact) operations. Although MIC was far more focused regarding aviation mission taskings and we enjoyed more success with all of our assets, LIC merits further background discussion. Our staff and commanders experienced a sharp learning curve in providing aviation support, particularly SWTs, to the brigade task force. From our experience, we were better prepared to fight alongside and in support of the infantry during MIC.

In LIC operations, infantry units essentially would comb an area for enemy caches of weapons, ammunition, fuel, food, and water. We relied heavily on constant communications with the aviation liaison officers at the TF MANCHU tactical operations center (TOC), constant monitoring of the TF MANCHU operations and intelligence (O/I) net (often, in fact, dropping down to battalion O/I or command), and debriefs from SWTs coming off station to track the battle. Unlike medium–lift and air–assault assets, our SWTs would often work directly with several different company commanders on their internal frequency modulated (FM) frequencies.

The concept of SWTs—or even attack helicopter companies—

working in direct coordination with ground maneuver companies is not new. During the Vietnam War, infantry company commanders whose units were in close contact with the enemy commonly directed "gunships" from aerial rocket artillery units onto the enemy. During the months before our JRTC rotation, the squadron conducted two tactics, techniques, and procedures exercises with the 2nd Brigade (TF MANCHU) for operations other than war. We tried several techniques of SWT employment in these exercises—including direct employment by the infantry company commander.

These exercises provided a great opportunity to train up for what we would see and how we would fight at JRTC. Brigade units were tasked to perform multiple, simultaneous missions—from cordon–and–search, to route clearing, to search–and–attack. These multiple missions demanded responsive SWT support throughout the AO, not just on a screen line or route reconnaissance—standard roles with which divisional cavalry units are familiar. SWT employment directed by the ground commander, although more decentralized in execution than doctrinal cavalry missions, best facilitated the requirement for immediate support in the ground unit's AO. This training—and the working relationship that developed between the squadron and brigade staffs—contributed to TF MANCHU's success at JRTC.

At JRTC, this technique did prevent our TOC from getting immediate SPOTREPs with any consistency. We also found it very difficult to maintain any consistent communications with the maneuver battalion TOCs/forward command posts by eavesdropping on the nets. But by working through various means of communication, we maintained positive control of our assets, if not an ironclad grip on the constantly changing friendly situation throughout the day.

At night, infantry units would establish defensive positions, from which patrols would be conducted, and often needed aerial resupply of Class I, usually water, and Class V at multiple drop points. This period allowed us to accurately update our friendly situation; this was about the only time during LIC operations in which activities settled to the point that TF MANCHU could accurately confirm the infantry battalion's positions in the AO. On the positive side, this frustrating period of operations served to get us on our toes as a staff and to work to anticipate sudden changes in missions for our SWTs. Changes to air assaults, aerial resupply, and medical evacuation missions—although numerous—were somewhat easier to anticipate and react to because these assets were more centrally controlled by the commander of TF SABRE .

With our TOC collocated with the TF MANCHU TOC and our aviation logistics operations center (ALOC) and unit AAs 40 kilometers to the rear (in the Peason Ridge Training Area), we exercised control over our assets through a redundant communications plan. Our ALOC would advise the TOC (flight operations personnel) on all aircraft departures and returns via satellite communications, land line, or as last resort, FM radio through retransmission. All units had been instructed to contact SABRE TOC on our O/I net for check in while they were en route between the ALOC and the TF MANCHU AO. At this time, we passed on the latest enemy and friendly situations and fragmentary orders (FRAGOs). Time allowing, particularly with FAT SCOUT and SWTs, the troop commander or air mission commander would arrive early for face–to–face updates.

Required to use a limited number of approved air corridors, we selected several for each day's operations—via operation orders (OPORDs)/FRAGOs—making it relatively simple to determine estimated times of arrival (ETAs) from the departure times forwarded to the TOC by the ALOC. If the anticipated ETA passed without contact from the inbound aircraft, SABRE TOC initiated contact. This procedure was especially critical for SWTs because of the spur–of–the–moment changes stemming from the nature of the infantry operations during LIC. We had anticipated the importance of communications and had hand receipted four PRC–113 very–high–frequency (VHF)/ultra–high–frequency (UHF) Have Quick radios from the 6th Infantry Division Air Force liaison office before departing home station. By positioning two in the TOC, one at the ALOC, and one with our forward command post, we established a second secure–voice means of communications with our aircraft. Although the MIC phase would prove far less erratic and hectic regarding aviation employment, redundant communications proved no less important to our command and control (C^2). This communications–reliant method of C^2 became essential to everything we did—including employing FAT SCOUT at night.

We employed FAT SCOUT during MIC to maintain screen lines after last light when C Troop could no longer provide coverage (our second air troop, B troop, was task organized as an attack troop and was the TF MANCHU reserve throughout the JRTC rotation). During the day, the FAT SCOUT crew reported to the TOC for its mission briefing and graphics for that night. The crew was also debriefed at the TOC by the intelligence/operations (S2/S3) night shift before returning to the ALOC upon mission completion.

During the initial defensive portion of MIC, FAT SCOUT employment enabled the TF SABRE commander to provide continuous battlefield information to the TF MANCHU commander.

As the "conflict" matured, forcing enemy forces into the defense, the TF MANCHU commander requested reconnaissance across the forward line of own troops (FLOT) into the enemy's rear area. The mission was planned and assigned to FAT SCOUT.

The details for the mission, such as specific routes, were planned by the crew in the TOC and coordinated by S3 with the fire support officer, TF MANCHU, and the infantry battalions. Our reconnaissance objectives were to find the enemy's defensive positions and, most importantly, identify its counterattack force. Both objectives were achieved with remarkable success: one, TF MANCHU enjoyed near–perfect (as AARs bore out), real–time battlefield information on the enemy's disposition; two, FAT SCOUT survived, being engaged only once—by friendly fire.

The following SPOTREPs were logged in the TF SABRE TOC during this critical mission:

- SPOTREP #1: "... estimate 30 personnel, dismounted in dug–in positions, in a wood line, vic (vicinity) WE058361, time 2228."
- SPOTREP #2: "... 12 dismounts, one armored vehicle, stationary, at road intersection, vic WE098338, time 0230."
- SPOTREP #3: "... nine armored vehicles, stationary, vic WE091340, time 0330."
- SPOTREP #4: "... two armored vehicles, stationary, in wood line, vic WE115367, time 0343" (later confirmed by FAT SCOUT 2).

After being plotted and analyzed, the third report was passed to TF MANCHU with our assessment that it was most likely the counterattack force. When plotted, this key report location was within 800 meters of the primary location that our and TF MANCHU's S2s had predicted the enemy would hide the counterattack force. The first and second reports lined up with defensive positions that the TF SABRE S2 had predicted and templated. The fourth report was passed up to caution TF MANCHU that the OPFOR could possibly have split its counterattack force, posing a flanking threat to our force—once on the objectives (see Figure 1).

Accurate intelligence reports enabled indirect fire to significantly disrupt and reduce enemy defensive preparations. At first light, TF MANCHU attacked and achieved its objectives, almost totally destroying the enemy forces in their positions. The counterattack force hide positions were targeted for indirect fire; the infantry companies—

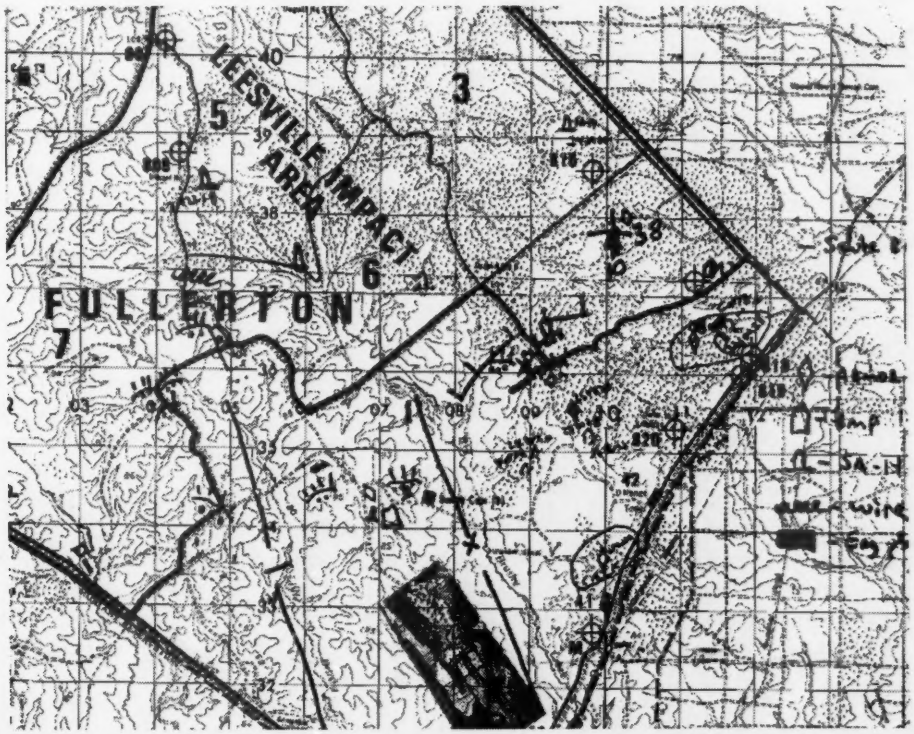


Figure 1. Actual locations the night of the FAT SCOUT mission, briefed during the AAR of the OPFOR.

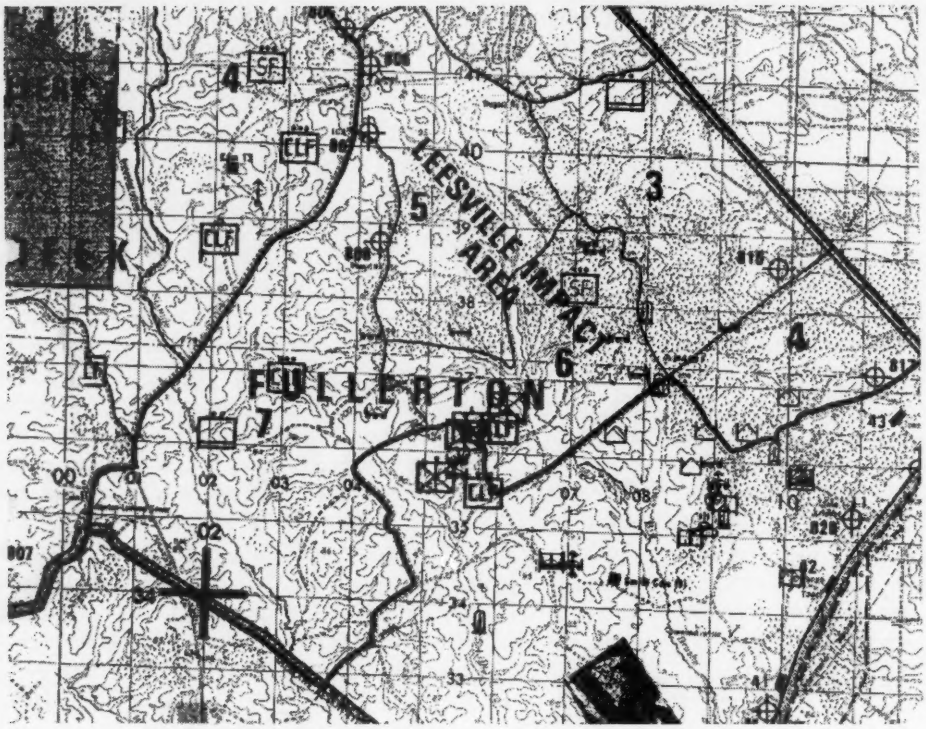


Figure 2. OPFOR positions at the end of the exercise.

on their objectives, reinforced with Team MECH (the balanced armor–mechanized team)—were ready and oriented for the counterattack. Before first light, one infantry company had been successfully air assaulted beyond the TF MANCHU objectives into delaying positions astride the most likely counterattack avenue of approach.

AARs showed enemy forces destroyed in their defensive positions, in the vicinity of where FAT SCOUT had reported. The counterattack force, after being forced to attack through the air assaulted infantry company, was destroyed in a meeting engagement by Team MECH and was unable to dislodge the infantry from its objectives. Figure 2 shows all OPFOR positions at the end of the exercise. Observers/controllers (OCs) also confirmed that FAT SCOUT had, in fact, found the counterattack force. The SPOTREP that we thought could have been a flank threat turned out to be vehicles that had broken down. As an added note, AAR discussions with OCs revealed that the OPFOR assumed that our UH–1 was "friendly" and was not actively engaging or avoiding it! Granted, this can be attributed, at least partially, to the JRTC Rules of Engagement. However, this should not invalidate planning considerations that it may work to our advantage if our enemies own U.S. or allied equipment.

TF SABRE certainly did not do everything right. For example, AARs proved that we needed stronger planning to prevent fratricide. With our Rube Goldberg thermal capability, we definitely did not own the night. But we felt that we had borrowed enough to do a key job as cavalry: provide real, if limited, security in the defense and detailed reconnaissance in support of offensive operations. Like our more modern units, we had—through initiative and innovation—used the night to capitalize on security and surprise.

Our high–tech weapons and sensor systems provided us with unmatched capabilities. Future units will undoubtedly face challenges, as we did, posed by mission demands exceeding their systems' inherent capabilities. As always, they will overcome those limitations only through initiative, innovation, and a "we–can, we–will" mentality.

This mental attitude must be fostered today and carried forward into the future by all aviator warriors. MG Dave Robinson—now retired, former commander of the U.S. Army Aviation Center, Fort Rucker, Ala.—said it best: "Aviation has to fight as cavalry"—***bold, daring, unconventional.***

Army Aviation Experimental Test Pilot Training Program Update

Major Daniel G. Wolfe and Captain(P) Thomas J. Bryant
U.S. Army Airworthiness Qualification Test Directorate
U.S. Army Technical Test Center
Edwards Air Force Base, California

Experimental test pilot, is it for me? Maybe you've heard the Army has experimental test pilots or maybe you've seen XP as a flight duty symbol and wondered what experimental test flights are all about. Perhaps you have always thought you would like to impact the quality of Army aircraft. Because of recent changes in leader development for experimental test pilots, there are new and exciting career opportunities for aviation officers.

I'm interested, now what? This is the time of year when the U.S. Total Army Personnel Command (PERSCOM) announces the due date for applications. The U.S. Army Aviation Technical Test Center (USAATTC), headquartered at Fort Rucker, Ala., will be sending teams to several continental United States (CONUS) installations to provide information briefings and answer questions on the program. For details, contact USAATTC at DSN 558–8179, the Airworthiness Qualification Test Directorate (AQTD) at DSN 527–4643, or the Military Acquisition Management Branch (MAMB), PERSCOM, DSN 221–2800, after 1 December 1994. For overseas units, a program information package will be available to requesting units after 30 November 1994.

Who can apply? Any aviation commissioned or warrant officer who meets the qualifications specified in Department of the Army Circular 351–90–1, Army Aviation Experimental Test Pilot Training Program, can apply for attendance at the United States Naval Test Pilot School.

Starting the application process. A PERSCOM message governs the application process. The message was released in November 1994. Applications are due to MAMB, PERSCOM, NLT 10 March 1995. Officers are encouraged to submit applications even if they do not meet all of the specified qualifications. If you are not qualified, plan your career to get the assignments and the education that will make you as competitive and qualified as possible.

What am I really applying for? The Army Aviation Experimental Test Pilot program produces experimental test pilots who perform and oversee the testing of future and current Army aircraft and aviation systems. Test pilots plan, evaluate, and report on the airworthiness and flight characteristics of aircraft. They also determine system performance, specification compliance, and system reliability. With the new test pilot program, you can expect to attend advanced civil schooling which, depending on your current degree status, will continue your education through a Master's degree in an engineering program at one of several outstanding universities.

Your future after selection. Your selection for this program will thrust you into a whirlwind of academic, flight, and physical activity that will test scholastic, physical, and organizational abilities as never before.

If you are selected for the cooperative program, you will depart your unit within 4 months to enroll in a Master of Science program. Within 15 months, you'll finish the academic portion of the degree. The degree will be awarded on completion of the United States Naval Test Pilot School. After advanced civil schooling, you will join the other selectees at the AQTD at Edwards AFB for flight orientations and exposure to flight test techniques. Sometime before you go to Patuxent River Naval Air Station, Patuxent River, Md., for test pilot school, you will have to pass the Navy's swim qualifications for aviators. They are difficult, and if you are not a confident swimmer as required by the circular, you must increase your proficiency.

Once at the Naval Test Pilot School, you will be assigned to the rotary–wing syllabus. You will undergo flight and academic instruction 5 days a week followed by report and flight preparation. The academic portion of test pilot school consists of 470 hours of instruction and 21 tests over the 11–month course in many disciplines to provide the foundation for the flight and report writing syllabus. Normally, 4 hours of each morning or afternoon is spent on academics. The current flight syllabus consists of flights in either the morning or afternoon, with the OH–6B Cayuse, the UH–60A Black Hawk, the OH–58A/C Kiowa, and the U–21A Ute as the primary aircraft. However, most students fly between 20 to 30 aircraft varying from gliders to the four-engine P–3 Orion to the F–18B Hornet. About 87 flight briefs are graded. The 21 various flight reports that these flights generate are due within 4 to 14 days after the flight and range in size from a few pages to over 100 pages.

Upon graduation, you will be initially assigned as a project test pilot. Often you will be testing in your aircraft of expertise. As your experience as a test pilot grows, so will the number of aircraft you will be called on to test. Eventually, you may be a project director or a project coordinator.

Wow, that's a lot. If you want an extremely challenging and rewarding aviation position, apply! The selection criteria are difficult, the schooling is rigorous, and the work is demanding.

Aircraft Transitions for Commissioned Officers—The Sky Is Not Falling

CPT William "B.J." Leary
Officer Management Section
Office of Military Personnel/Adjutant General
Directorate of Human Resources
Fort Rucker, Alabama

How often have you overheard the following conversation?

CPT Smith: *"John, I am really worried. DA is telling me that there are no transitions available, and I am going to Korea as a Huey pilot. I think I'm going to take the money and run."*

CPT Jones: *"Yeah, I know how you feel. As an OH–58C aviator, I'm looking at the same thing. I know if I don't get an advanced aircraft transition, I might as well get out. My career is over!"*

As the Aviation Restructure Initiative (ARI) rapidly converts active–component units to the new A–series modification tables of organization and equipment (MTOEs), requirements for aviators qualified in modernized aircraft increase while requirements for aviators qualified in nonmodernized aircraft decrease. (Modernized aircraft include the AH–64 Apache, the OH–58D Kiowa Scout and Warrior, the CH–47D Chinook, and the UH–60 Black Hawk.)

Company–grade commissioned officers (including me) have been speculating over the viability of a career as a nonmodernized–aircraft–qualified aviator. Many officers have the perception that their career is dead if they do not receive a modernized aircraft qualification course (AQC) soon. *This is absolutely untrue.* Let's take a look at the facts.

Most (83 percent) commissioned officers assigned to company level eventually will receive a modernized AQC. The remaining 17 percent who do not receive a modernized aircraft qualification will be needed to fill the nonmodernized aircraft positions that remain through the year 2010.

The company–grade aviation commissioned officer strength for the active component currently totals 3,177. Of this total, 1,567 are already qualified in a modernized aircraft, leaving 1,610 who are qualified in nonmodernized aircraft. Of these 1,610, only 444 are in excess of nonmodernized aircraft requirements. Let's take a look at who these 444 aviators are. The following numbers represent nonmodernized percentages of year groups (YGs) and are not exact numbers. Of the 444 aviators, 54 are YG 83– and YG 84–promotable captains who will get a modernized aircraft qualification, as needed, based on their utilization as a major and 93 are YG 85 and YG 86 officers who have completed or have from 4 to 10 more years to obtain a modernized AQC. The remaining 116 are YGs 87 through 88 midgrade captains who may have to compete for company command and primary staff experience in a headquarters or maintenance company of a modernized aircraft battalion as a nonmodernized aviator. Battalion and brigade commanders realize that not all aviators who come to them will have the proper aircraft qualification under their belt. This will continue to be the exception rather than the rule and should last only a few years until the school house can catch up to the ARI time line.

The U.S. Total Army Personnel Command (PERSCOM), Aviation Branch, receives about 370 modernized AQC quotas per

year. This includes 20 fixed–wing quotas. These quotas are determined by many factors—including projections of future force structure, projections of inventory, and most importantly, dollars available to train. By dividing the number of modernized AQC quotas per year (for the active component) into the inventory of nonmodernized–aircraft–qualified officer aviators, it would take a little more than four years to qualify every commissioned officer now on active duty. However, because of continuing nonmodernized aircraft requirements, there is no intent to qualify every officer now on active duty in a modernized aircraft. By 1 October 1997, company–grade requirements will exist for 203 commissioned officers qualified in the UH–1 Iroquois "Huey," 171 commissioned officers qualified in the AH–1 Cobra, and 129 commissioned officers qualified in the OH–58A/C Kiowa. Yes, that means that some folks will still be going to nonmodernized units worldwide.

For each person who receives a second modernized transition, one aviator does not get his or her first one. Current policy precludes aviators who already have one modernized aircraft qualification from getting a second modernized qualification without approval from PERSCOM. The granting of these requests is extremely rare. Do not complicate the process by asking for more than one transition when it is at the expense of a fellow aviator.

Effective last October, 50 percent of available advanced aircraft quotas will be fenced for initial entry rotary wing (IERW) graduates. This percentage will continue to climb to 65 percent in fiscal year (FY) 96 and 85 percent in FY 97. Although this reduces the number of modernized AQCs available for aviators currently on active duty, it is a crucial step in building the future aviator force and ensuring that cockpit seats are filled at the company level.

In the words of the Aviation Branch Chief, MG Ron Adams, "There will be numerous challenges and stumbling blocks to overcome . . . (just) keep the faith and the proper focus."

Despite downsizing and ARI modernization, viable aviation commissioned officer career patterns will continue to exist until the year 2010 for lieutenants through lieutenant colonels flying AH–1, OH–58A/C, and UH–1 aircraft. Of the approximately 275 commissioned officers who graduate from IERW each year, about 47 will remain in nonmodernized aircraft systems throughout their entire career. Knowing the fortitude of Army aviators, I believe that these commissioned officers will excel just as their brethren do in modernized systems.

The final point that you should take away from this article is that promotion and selection boards normally comprise officers from all basic branches—not just aviation. These other officers do not care what kind of aircraft you fly—only that the jobs you have held have been accomplished to the best of your ability. Manner of performance is the overall determining factor behind your success.

If you still feel the need to look at promotion–board statistics, look at the last lieutenant–to–captain promotion list. *Nonmodernized aviators* were selected for promotion at a rate of *87 percent* while *modernized aviators* had a selection rate of *81 percent*. So, ask yourself—does it really matter?

Aviation Proponency

Readers may address matters concerning aviation personnel to—
Chief
Aviation Proponency
ATTN: ATZQ–AP
Fort Rucker, AL 36362–2359.

TEXCOM

Two Army Aviation Pioneers Are Hall of Fame Charter Members

Mr. Wayne E. Hair
Public Affairs Officer
U.S. Army Test and Experimentation Command
Fort Hood, Texas

Two Army aviation pioneers have been inducted into the Army's first and only Operational Testers Hall of Fame at Fort Hood, Tex.

The headquarters of the U.S. Army Test and Experimentation Command (TEXCOM) at Fort Hood, Tex.—the home and mecca of independent operational testing—is the site of this new hall of fame, which honors operational testers from throughout Army history. Eight former testers were in the first group to be inducted during TEXCOM's twenty–fifth anniversary ceremonies last October.

LT Benjamin D. Foulois

Out of the group of eight, two are historical inductees, whose achievements predate the existence of TEXCOM. One of these was an Army aviator—LT Benjamin D. Foulois, born in 1879. He tested the Army's first "aeroplane" at Fort Sam Houston, Tex., 1910 through 1911.

On 10 February 1910, Foulois, eight enlisted men, one civilian mechanic, and one badly damaged "aeroplane" moved onto the mounted drill field on the northwest section of Fort Sam Houston.

"He had no facilities—went to a place with no airfield. He was given a crate of junk that he had to piece together and then risk his neck to fly," explained BG Anthony C. Trifiletti, TEXCOM commander, at the induction of Foulois.

"He ran a test on an airplane that originally flew approximately 140 feet. That is less than the wingspan—172 feet—of our C–17 that we are engaged in testing today," Trifiletti pointed out.

The aircraft provided to Foulois and his "flying soldiers" for operational tests was a biplane, bought from the Wright brothers in 1908. A contraption of bamboo poles and canvas—fitted around a gasoline engine—it swung off the ground from a monorail.

"My experiments will cover a wide range and will continue at Fort Sam Houston for some time to come," said Foulois, following his history–making first military flight in the State of Texas.

The Signal Corps allocated $150, which was expended during the first four months, to Foulois for aircraft maintenance for the first year. Foulois dug into his own pockets to keep his test mission operational.

Foulois also conducted aerial photography experiments and is credited with making the first aerial map from an airplane. This innovative

tester also devised the first known "safety belt," a four–foot trunk strap, with which he lashed himself into the airplane.

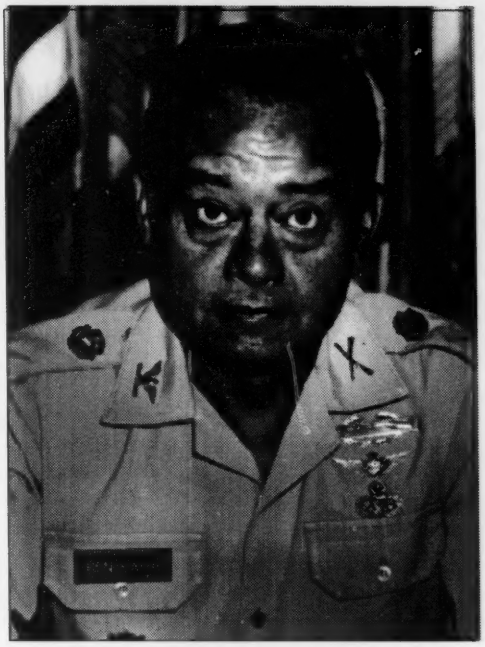
Foulois eventually reached the rank of major general and became chief of the Army Air Corps on 22 December 1931. He retired 31 December 1955 and died in 1967.

A fellow charter member of the Operational Testers Hall of Fame is retired COL Robert A. Bonifacio, inducted for his exceptional contributions to operational testing from February 1976 through March 1982.

COL Bonifacio—upon approval by the Department of Army for activation of a totally independent aviation operational test organization—was selected as the first Army Aviation Test Board President/Commander. Unlike the other U.S. Army Training and Doctrine Command's operational test boards, which were transferred intact from the Test and Evaluation Command, the Aviation Test Board was created from scratch on 1 July 1976.

COL Bonifacio's contributions to Army aviation can be seen in today's modern fleet of aircraft, ground and aviation life support equipment, and future Army aviation systems. During his tenure, he was directly responsible for the planning, execution and reporting of 86 programmed user tests.

Major acquisition programs effectively supported with tests, studies, and evaluations included the UH–60 Black Hawk, Light Combat Helicopter (LCH), UH–60 simulator, and virtually all of the aircraft survivability equipment being used on Army aircraft today. The roots of the Army's AH–64 Longbow Apache and RAH–66 Comanche helicopter programs can be traced back directly to the Light Combat Helicopter test efforts. Data obtained during LCH testing of modified OH–6 Cayuse and OH–58 Kiowa helicopters



COL Robert A. Bonifacio

became the cornerstone of the requirements documents that support the Longbow Apache and Comanche programs.

Bonifacio recognized early on that the Army would be required to streamline and reduce end strength, and that effort would ultimately affect the structure of test organizations. He also recognized that Army aviation noncommissioned officers (NCOs) could perform as test officers. In 1979, COL Bonifacio initiated a program to recruit and train aviation NCOs as test officers. His personal efforts resulted in the successful planning and execution of an operational test by an NCO in 1980. A standard was set that has been carried on to present–day operational testing, with NCOs conducting tests around the world.

Today's TEXCOM Aviation Test Directorate can trace its reputation of ensuring the user receives the best possible equipment, tools, and training to Bonifacio and his philosophy of *fidelis operanti*—"fidelity to the operator." Bonifacio himself, however, credits a team effort.

"Without the military and civilians which made up the team, none of the testing goals could possibly have been met. All successful testing requires a total team effort—not just of the testers but of all the personnel within the acquisition community," Bonifacio said from his home in Titusville, Fla.

"Every member of the Aviation Board during the period of 1976 through 1982, should be considered as part of this prestigious award," Bonifacio said.

U.S. Army Test and Experimentation Command

Readers may address matters concerning test and experimentation to—
Headquarters, TEXCOM
ATTN: CSTE–TCS–PAO
Fort Hood, TX 76544–5065.

The United States Army Aviation Logistics School Reorganizes

MAJ William M. Gavora
and
CPT Lisa S. Glen
U.S. Army Aviation Logistics School
Fort Eustis, Virginia

The United States Army Aviation Logistics School (USAALS), located at Fort Eustis, Va., reorganized on 1 October 1994, in conjunction with the Combined Arms Support Command (CASCOM) reorganization. This is the latest of several changes within the structure of aviation maintenance training.

Although the USAALS was initially established at Fort Eustis on 1 October 1983, its mission traces back to World War II. During the war, aircraft mechanics received training in an enlisted field artillery aircraft mechanic course at Fort Sill, Okla. Soldiers with maintenance experience were selected from the Army ground forces.

After World War II, Army and Air Force rotary–wing and Army fixed–wing mechanic courses were conducted at Sheppard Air Force Base, Tex., and then moved to Gary Air Force Base, Tex. The Ordnance Corps—the proponent of logistics support for Army aviation—recommended the use of civilian contractors to conduct the Army's aviation maintenance training. This proposal, however, was rejected, and the Department of the Army established a 19–week Army helicopter mechanics course at Fort Sill to supplement the Air Force training.

Army aviation experienced many supply and maintenance problems during the Korean War. During this conflict, the Air Force handled aircraft procurement, depot maintenance, and supply—while the Army determined requirements and handled supply and maintenance at the organization and field levels. This division of responsibility lasted until the early 1950s.

The Transportation Corps became the aviation logistics proponent in 1952. In 1953, the Army Aviation School formed at Fort Sill and trained aviation officers, warrant officers, and enlisted soldiers; the Air Force continued to provide some helicopter and fixed–wing training. In 1954, further changes occurred as the Army Aviation School made plans to move to Fort Rucker, Ala. Most aviation logistics training transferred to the Transportation School at Fort Eustis and remained a Transportation School function until the USAALS activated in 1983.

Although the USAALS became a separate school, command and control remained with the commandant of the U.S. Army Transportation and Aviation Logistics School (USATALS). Command and control transferred to the Aviation Branch Chief in 1988, based on a special study group's findings that command and control channels were inconsistent with the original Aviation Branch charter. Effective 1 October 1988, USAALS became a nonsupporting tenant activity at Fort Eustis under the command and control of the commander of the U.S. Army Aviation Center (USAAVNC), Fort Rucker.

In January 1993, the U.S. Army Training and Doctrine Command (TRADOC) commanding general directed CASCOM to examine consolidation of functional mission and base operations (BASOPS) on the Virginia peninsula (the area from Fort Eustis to Hampton). The CASCOM plan included the following:

- Transferring the personnel proponency, combat developments, training developments, and directorate of evaluation and standardization (DOES) functions and capabilities to Fort Lee, Va.
- Reconfiguring remaining USAALS elements into a Directorate of Instruction subordinate to a Fort Eustis Transportation Corps brigade commander.

The initial CASCOM plan would have the following effects:

- Breaking the command line between the assistant commandant of USAALS and the commander of USAAVNC.
- Identifying resource reductions and fracturing the resource management process: that is, aligning USAALS to CASCOM.
- Aligning logistics to a separate reporting function with no allegiance to aviation roles, missions, and doctrine.

In February 1993, the TRADOC commanding general approved the CASCOM concept and directed development of an Army Regulation (AR) 5–10, ***Reduction and Realignment Action Reporting Procedures***, package for implementation. The Aviation Branch responded with recommendations intended to reduce the impact of the CASCOM proposal on aviation. The branch agreed to split combat development elements along aviation maintenance and logistic lines but wanted to retain the training development functions that specifically support aviation maintenance. The branch also wanted to retain command and control and resource management capability within its aviation maintenance organization.

The TRADOC commanding general approved mission consolidation at Fort Lee in July 1993 but directed BASOPS consolidation to occur on a functional basis. Memorandums of agreement between the commanders of USAAVNC, CASCOM, and the U.S. Army Transportation Center and Fort Eustis (USATCFE) were signed in August 1993, with reorganization taking effect 1 October 1994. These agreements stipulated that 18 combat development spaces would move to Fort Rucker and 4 combat development spaces would move to Fort Lee; 4 proponency spaces would move to Fort Rucker and 1 proponency space would move to Fort Lee; and 8 evaluation and standardization spaces would move to Fort Rucker. Overall, 56 civilian positions were abolished because of the reorganization and the move of the Maintenance Management/Maintenance Test Pilot Course to Fort Rucker earlier last year.

The USAALS currently consists of a headquarters element, a support group, three training departments, two staff and faculty companies, and the Department of Plans and Evaluation. There are 827 personnel assigned: 15 commissioned officers, 12 warrant officers, 682 enlisted soldiers, and 118 civilians. The school's mission changed from combat development, training development, and training to the current mission of providing aviation maintenance training to U.S. military as well as international students.

The USAALS has changed considerably from its inception as a mechanic course at Fort Sill during World War II. The tradition of turning out the best aviation mechanics in the world, however, continues—no matter what the school's configuration.

U.S. Army Logistics School

Readers may address matters concerning aviation logistics to—
Assistant Commandant
U.S. Army Aviation Logistics School
ATTN: ATSQ–LAC
Fort Eustis, VA 23604–5415.

The U.S. Army Aeronautical Services Agency Also Supports the Reserve Components

LTC Ricky Smith
Department of the Army Regional Representative
Southern Region
Federal Aviation Administration
College Park, Georgia

This article begins with a short—one question—quiz. It is multiple choice.

Question:

The Department of the Army Regional Representatives (DARRs) provide support to which units?

A. *Active U.S. Army.*

B. *Army National Guard.*

C. *U.S. Army Reserve.*

D. *All of the above.*

Answer: *D*. Reference: Army Regulation (AR) 95–2, ***Air Traffic Control, Airspace, Airfields, Flight Activities and Navigational Aids.***

This regulation prescribes U.S. Army policy, responsibilities, procedures, and rules for airspace, airfields, flight activities, navigational aids, and air traffic control. It covers—

- Army air traffic control general provisions.
- Qualifications and ratings.
- Air traffic control awards program.
- Certification of airfields, airspace, and special military operations requirements.
- Terminal instrument procedures.
- Aeronautical information.
- Terminal air navigation.
- Approach facilities.

This regulation is applicable—*now here is the important part of this article*—to the *Active U.S. Army*, the *Army National Guard*, the *U.S. Army Reserve*, and all personnel who perform duties in U.S. Army Air Traffic Control (ATC) facilities and support facilities. As you can see, the U.S. Army Aeronautical Services Agency (USAASA) and its DARRs are here to support the Total Army in all airspace matters.*

Who is responsible for this mission? DARRs serve as U.S. Army representatives to the Federal Aviation Administration (FAA) Regional Headquarters for the Deputy Chief of Staff for Operations and Plans (DCSOPS), Headquarters, Department of the Army (HQDA), who has Army staff responsibility for airspace and U.S. Army aviation operations and for developing policy concerning ATC and flight procedures in coordination with other Department of Defense (DOD), federal, state, local, national, and international agencies or individuals.

* The U.S. Army Air Traffic Control Activity (USAATCA), U.S. Army Aviation Warfighting Center, Fort Rucker, Ala., has specific responsibilities and duties concerning air traffic control, which are delineated in AR 95–2.

Bonus Question:

Do DARRs support the airspace needs of aviation and ATC units only? *True or False.*

Answer: *False.*

Whether you are an Artillery or Air Defense Artillery unit trying to conduct some type of range operation, such as an M1 unit establishing a track—or an aviation unit or aircraft or air traffic services conducting a major deployment—the appropriate DARR is responsible for providing assistance so that you (Active Army or Reserve Component) can complete your mission. For those who are not familiar with USAASA, other than through this publication, here is an overview.

USAASA is a field operating agency of the ODCSOPS, HQDA. Fort Belvoir, Va., is the location for USAASA headquarters, with DARRs located at each of the FAA regional headquarters. Also, a detachment—the U.S. Army Aeronautical Services Detachment, Europe (USAASDE)—is located in Heidelberg, Germany, and a full–time Army representative is assigned at the FAA headquarters in Washington, D.C. A significant portion of our mission is to provide the official interface among the Army, other services, and the FAA and to help ensure that commanders have adequate airspace in which to operate and train.

What can the DARRs do for you? AR 95–2 lists their duties and responsibilities, but here are a few examples. Each DARR office—

- Reviews airspace proposals processed through its FAA regional offices and keeps U.S. Army and other airspace field commands advised of critical and conflicting issues.
- Conducts seminars to train air traffic and airspace (AT&A) officers on current airspace issues and interpretation of DOD and FAA regulations.
- Coordinates and deconflicts airspace for aircraft operation in or near a natural disaster area.
- Participates in the development and review of letters of agreement and letters of procedure to ensure that they are accurate and meet current regulatory requirements.
- Provides a member of the DARR office to accompany the FAA representative if your facility receives a visit by a representative of the FAA.

The DARRs also can assist your organization in many other ways. If you are not sure whether your request falls within the DARR charter, just give the organization a call. Someone at the DARR office will help you or will point you in the right direction.

If you have questions or require assistance, see AR 95–2 or the most recent edition of the Flight Information Bulletin, Technical Bulletin (TB) AVN 1, for the address and telephone number for Headquarters, USAASA, or its field offices.

U.S. Army Aeronautical Services Agency

USAASA invites your questions and comments and may be contacted at DSN 656–4871 or commercial 703–806–4871; or write to—
Commander
U.S. Army Aeronautical Services Agency
ATTN: MOAS–AI (Bldg 1466)
9325 Gunston Road, Suite N319
Fort Belvoir, VA 22060–5582

Command Sergeant Major Marvin E. Horne

Position Yourself for Success

Promotions—You Are Your Own Best Career Manager

MSG Anthony D. LaPres
Personnel Proponent Systems Manager
Aviation Proponency
Fort Rucker, Alabama

The promotion board is for each of us an emotionally significant event. It is an anxious and often puzzling time when noncommissioned officers (NCOs) consider the workings of this somewhat mystical group that gathers at Fort Benjamin Harrison, Ind. With the most recent release of the sergeant first class promotion list, these workings are the subject of much debate. With this thought in mind, the specifics of the most recent promotion board, the trends of the past five boards, and some expectations for the future have been examined.

In the most recent board, the specific deliberations of the members are known only to the those on the panels that make up each board. But what they tell us is what the average NCO they selected looked like. Those selected for promotion had an average time in service of about 12 years for the primary zone and 8 years in the secondary zone for career management field (CMF) 93 (Aviation Operations). This was slightly higher at 13 years for the primary zone and 10 years for the secondary zone in CMF 67 (Aircraft Maintenance). The average time in grade was about 4.5 years for the primary zone and 2 years for the secondary zone for CMFs 93 and 67.

A review of the last five boards reveals that this most recent board had a selection rate that was the second lowest of the last five boards for CMF 93 at 22 percent. It was third lowest of the last five boards at 19.7 percent for CMF 67. This was below the Army average of 23.9 percent and represents a change from the past. Aviation has traditionally received promotions at better than the Army average.

On the horizon looms a number of significant changes that will affect promotion opportunities. The merger of military occupational specialties (MOSs) 93P (Aviation Operations Specialist) and 93C (Air Traffic Control Operator) at the master sergeant level can reasonably be expected to bring the selection rates of these two specialties more in line with the Army average. This means that 93P, which has enjoyed a selection rate above the Army average, will slow slightly and 93C, which has had a selection rate below the Army average, will rise slightly. This mixed pool of 93C and 93P master sergeants will share opportunities for sergeant major in MOS 93P.

Also in the future is the transfer of 68L (Avionic Communications Equipment Repairer), 68Q (Avionic Flight Systems Repairer), 68R (Avionic Radar Repairer), 93D (Air Traffic Control Equipment Repairer) and a portion of 68P (Avionic Maintenance Supervisor) to the ordnance corps. With transfer, these soldiers can expect a better promotion opportunity as they compete with like technical skills. The 68–series specialties that remain in aviation can expect a slightly better opportunity as they compete for the same number of senior positions as members of a smaller population.

Most significant is the proposal to establish CMF 15 in what has come to be called "stripes on the flight line." This proposal is truly a win–win initiative. Soldiers in technical tracks will not compete against those in leadership tracks. Soldiers in technical tracks can then expect success at the promotion board as they will compete with other technicians. This initiative establishes a capper MOS 15Z or 67Z for all aviation specialties. With a single capping MOS for each track, excellence will have the opportunity it rightfully deserves to rise to the top. Too often, excellence has been stifled by limited positions. Often, excellent soldiers are passed over while others are promoted largely because of their specialty. This capper MOS will, as an adjunct, develop a cross–fertilization effect as NCOs assume jobs that would have been outside their old MOS track. This will develop a more versatile, knowledgeable, and effective aviation NCO corps.

Last, soldiers who performed in tough, high–risk jobs and received good NCO evaluation reports (NCOERs) were viewed with favor by the board. The board reported that the job description on the NCOER should clearly articulate the responsibilities of the position. This description must provide a clear picture of what the NCO was responsible for—in easily understood terms. Senior raters should not reiterate the comments of the rater but rather describe in honest terms the potential of the NCO for future schooling and assignments. A comment, such as "promote ahead of peers," clearly does that.

You are your own best career manager. It is up to you to make sure that your NCOER accurately reflects your performance and that your official file accurately presents the "total" you. NCOER counseling sessions should help you and your rater develop an NCOER that tells who and what you are. In this way, you position yourself for future opportunities and success.

U.S. Army Class A Aviation Flight Mishaps

Fiscal Year	Number	Flying Hours	Rate	Military Fatalities	Total Cost (in millions)
FY 94 (through 31 December)	7	316,940	2.21	2	15.1
FY 95 (through 31 December)	1	304,242 (estimated)	0.33	0	4.6

"BACK TO THE FUTURE"—RESTRUCTURING THE WARFIGHTING CAPABILITY OF THE UNITED STATES—Part 2

Lieutenant Colonel Jack A. Kingston, USAR
Chairman, National Security Advisory Board
Washington, DC (Copyright 1994)

Part 2 discusses the concept of combined arms and the recommendations and justifications for a simplified, yet optimal, structure for America's Armed Forces.

INTRODUCTION

This article provides the outline to what may appear to be a heretical or unwarranted premise, namely that the best redefinition of the future roles and missions of the services may, in fact, rely on the past...which will point to the future.

Accordingly, my recommendations would incorporate all of the successful aspects of the Goldwater–Nichols Act as far as Unified Commands and jointness. They will include many of the recommendations of former Chairman of the Joint Chiefs of Staff (CJCS) General (GEN) Colin Powell and the emerging initiatives by the current JCS leadership. However, they would go both far beyond, and far back, to simplify service roles and missions...by basic functions. If nothing else, I intend to set the conceptual framework for reorganizing America's Armed forces out to 2015 to 2025 A.D., by asking, or at least prompting, the right questions.

THE ISSUES

"A man can't no more explain something he don't know...than come back from someplace...he ain't been.

MARK TWAIN

GEN Powell's 1993 Memorandum to the Secretary of Defense (SECDEF) (fig. l) contained a preliminary list of specific issues and recommendations to fix problems in the roles and missions of the services. In summary, GEN Powell's review was mandated by the Goldwater–Nichols Act; it focused on 16 major areas—spanning the entire force and, not surprisingly, concentrating on airspace, aircraft, and airpower. Confronted by the media demanding the justification for "**four** air forces," an exasperated GEN Powell declared autocratically, "We only have **ONE** air force." That terribly ironic edict recalls a similar irrational pronouncement by the Vice Chief of Staff of the Army (VCSA) GEN Vessey in 1982, "Army aircrews are groundtroops!"

Former SECDEF Les Aspin responded on 15 April 1993 by issuing a decision memorandum that differentiated GEN Powell's recommendations to improve the roles and missions of the services into three categories:

. Move quickly toward some level of implementation in virtually all of the air power, close air support (CAS), search and rescue (SAR), aviation training and maintenance, as well as establishing a commander–in–chief (CINC)–continental United States (CONUS).

. Undertake fast–track studies in the merger of the U.S. Space Command (SPACOM) and the U.S. Strategic Command (STRATCOM), intelligence, adaptive force packages, artillery, and multiple launcher rocket systems (MLRS) sup-

ISSUE: Joint HQs for CONUS
RECOMMEND: Combine U.S. Army Forces Command (FORSCOM), Atlantic Fleet (LANTFLT), Air Combat Command (ACC), and Marine Forces Atlantic Area (MARFORLANT).

ISSUE: Space Mission
RECOMMEND: Eliminate SPACOM; consolidate STRACOM.

ISSUE: Depot Maintenance
RECOMMEND: Consolidate all services.

ISSUE:Close Air Support
RECOMMEND: Include helicopters. All services perform.

ISSUE: Flight Training
RECOMMEND: Consolidate by type aircraft.

ISSUE: Support Aircraft
RECOMMEND: Consolidate and reduce.

ISSUE: Attack Helicopters
RECOMMEND: Maintain Marine and Army.

ISSUE: Support Helicopters
RECOMMEND: Consolidate by area.

ISSUE: C–130 Hercules Aircraft
RECOMMEND: Maintain by service.

ISSUE: Contingency Missions
RECOMMEND: Maintain Army and Marine.

ISSUE: Tanks and MLRS
RECOMMEND: Army and Marine tanks; Army provide MLRS.

ISSUE: Theater Air Defense
RECOMMEND: Complete review required.

ISSUE: Initial Training
RECOMMEND: Review and consolidate.

ISSUE: Chaplain/Legal Services
RECOMMEND: Not consolidate.

ISSUE: Intelligence Agencies
RECOMMEND: Consolidation options.

ISSUE: Active/Reserve Mix
RECOMMEND: Evaluate RAND study; study Guard and Reserve.

Figure 1. Former Chairman, Joint Chiefs of Staff, General Colin Powell's Issues/Recommendations

port, depot maintenance, air defense (AD), and helicopters.

. No immediate changes necessary, but review continues on the remaining issues.

Secretary Aspin also directed that the Office of the Secretary of Defense (OSD) and the Joint Staff address these issues in a bottom–up review:

. Air power roles and force requirements.

. Ground force expeditionary roles and missions.

. Active and Reserve force requirements.

. New mission areas (i.e., peacekeeping).

Subsequently, overwhelming and ongoing changes have dramatically "down–sized" the Department of Defense (DOD); for example, closing 800 bases; and cutting 500,000 Active and 250,000 Reserve troops, 70 percent of nuclear weapons, 100 hardware programs, and 30 percent of the budget—all of which will also affect some 1 million civilian jobs. Not surprisingly, many of these changes have been directed from the top down, by political authority. It is safe to say that fundamental changes would not have been directed from within. That is why, despite the "glass–ceiling" on issues established by peremptory JCS edicts (namely, Vessey and Powell), Congress further reinforced the need for substantive change because of the mismatch between roles and missions; the need for greater efficiency and combat effectiveness; triennial CJCS reviews that had failed to produce the comprehensive review envisioned, and of course, the obvious challenges of changing from within. Consequently, in 1994 Congress directed the SECDEF to set up the Commission on Roles and Missions of the Armed Forces, which initially identified and focused on 23 major issue areas (many of which involve air forces) (fig. 2).

"General Colin Powell's roles and missions report is a good start...but I believe we should be bolder in our efforts."

JOHN WARNER —Senator (R–Va.)
Armed Services Committee

RECOMMENDATIONS

With that recent history and Part 1 of this article as background, I suggest that a substantive transformation in DOD is warranted as follows:

First, the Army would revert to a CONUS defense mission with a secondary mission of fighting major regional conflicts followed by reconstitution and reinforcement of strategic, forward-deployed forces. The Base Force would be some 300,000 to 500,000 troops manning 3 to 5 corps of the Active Army and responsible for strategic deterrence and defense; the Reserve would provide the bulk of logistics and reconstitution capability; and the National Guard would retain it's civil, State, and home defense role.

Second, within the Army, the infantry, artillery, and armor branches would merge into one umbrella branch and consolidate the universal functions currently performed by officers of those branches (direct fire, indirect fire, close combat, and mechanized warfare), into that of ground combat. The divisional structure would be deactivated and the division–based corps would be replaced by the brigade–based, "armored" corps concept. The XVIII Airborne Corps, Fort Bragg, N.C., would remain unique with airmobile, airborne, and light/mountain infantry brigades. Each new armored corps would be made up of three equal armored brigades, plus one combat aviation brigade, one combined heavy–artillery/air defense (AD) brigade and one combined logistics and transportation support brigade. Each new "armored brigade" would be commanded by a general officer and field an air cavalry squadron, an MLRS battalion, a combat engineer battalion, a support battalion and three equal "armored battalions" consisting of five company–sized elements: one tank company (Abrams), one armored infantry company (Bradley), one self–propelled medium–artillery battery, one cavalry troop (wheeled–light armored vehicle (LAV) and self–propelled mortars), and a headquarters company. Man–portable, AD/antitank missiles would

Issue Areas

Organizational	Operations	Operational Support	Infrastructure
Joint Warfighting	Nuclear Triad	Space	Streamlining Acquisition
OSD, Joint Staff and Service Secretariats	Theater Air/Missile Defense	C4	Procurement Oversight
Unified Command Plan	Army and Marine Capabilities	Intelligence Dissemination	Central Logistic Support
DOD Agencies	Close Air Support	Battle Damage Assessment	Depot Maintenance Management
Coalition Interoperability	Deep Battle/PGMs	Combat Search and Rescue	Materiel Management
Constabulary Forces	Peace Operations		Medical and Health
			Airpower Organization
			Aviation Infrastructure

Figure 2. Commission on Roles and Missions

be issued at platoon level.

Third, in the same way the Marine Corps would be responsible for amphibious and ground combat—light, but would be established as a full service independent of the Navy. However, the Corps would also assume the forward presence, crisis response, and peacekeeping missions with a total of some 200,000 rapidly deployable troops organized into three active Marine Expeditionary Forces (MEFs) and backed up by one Reserve MEF for logistics and training. No aircraft, no tanks; only wheeled LAVs or armored amphibious vehicles (AAVs).

Fourth, the Navy would be reduced to a reasonable number of stealth technology–surface combatants, consistent with pending arms control treaties, including submarines and stealth vessels. No aircraft, no infantry, no artillery, no tanks, and no independent authority. The Coast Guard would be independent of the Navy in peacetime and in wartime.

Fifth, all fighter/bomber, airlift and transport aircraft, including helicopters, would revert to the Air Force. Army, Marine, and Naval aircraft, aircrews, and missions would be consolidated by the Air Force, including tactical air defense. Furthermore, the huge inventory of some 18,000 aircraft in all of the services (7,599 in the Army alone) could be drastically reduced by tilt–rotor/X–wing/canard–rotor–wing/vertical and short take–off and landing (VSTOL) aircraft, planned obsolescence, and reorganization. The Air Force's de facto status (as the principal strategic combat arm) would incorporate doctrinally "de jure" recognition as America's principal tactical combat and maneuver arm, supported by the Navy, Marines, and Army.

Sixth, a new uniformed service and occupational specialty, the Strategic Aerospace Force, would assume control of all troops, aircraft, nuclear weapons, military satellites, anti–ballistic missile systems, and rockets (including the National Aeronautics and Space Administration, Defense Intelligence Agency, and Central Intelligence Agency) that transit or operate beyond the flight envelope of fighter/bomber aircraft. The Navy would continue to operate submarines, but operational control of submarine or surface sea–launched nuclear ballistic missiles (SLBMs) would evolve to the Strategic Aerospace Force in conjunction with the National Command Authority (NCA).

Seventh, all special operations forces from each service would remain unified under the Special Operations Command, which would, along with the other Unified and Specified Commands, continue to report directly to the NCA, under the administrative control of the general staff.

Eighth, all military service staffs would be reduced, subsumed, and replaced by one (Joint/Unified) American general staff representing and directing all of the services in a single, new uniform; ground and Airforce flag officers would be "Generals"; while naval and strategic flags would be "Admirals." The general staff concept could also incorporate and consolidate all service attache, chaplain, judge advocate, signal, and medical service corps branches. The services would retain their individual, traditional uniformsand titles: the Army, Marine Corps, Navy, Air Force, and Coast Guard along with a new Aerospace uniform.

Ninth, all NSC, DOD, and service secretariats would be reduced, subsumed, and replaced by one single DOD civilian secretariat with reasonable restraints on personnel and redundant functions. There is absolutely no justification for five parallel staffs at the NSC civilian, defense civilian, joint military, service civilian, and service military level.

JUSTIFICATION AND RATIONALE

"We military have a tendency to concentrate too exclusively on the needs of our own service. We can't even have the luxury of thinking of ourselves simply as an army, or a navy, or an air force...we can't train as the Army...because we are not going to operate as the Army, but rather as a joint–combined force."

GEN (Ret) JOHN R. GALVIN, former SACEUR
Olin Professor of National Security, USMA

America's Army

In 1992, the Total Army was the 7th largest standing land force in the world; ongoing reductions will soon make it only the 11th largest. However, technological advantages, in conjunction with the new world order, indicate that the Army of 1992 could not have been overwhelmed in combat by any foreign power (using the 3:1 model of ratios in troops, major weapons, aircraft, and combat power for a successful attack). Applying this notional 3:1 Overwhelming Force Model indicated that the Marine Corps alone could defeat 50 percent (70 countries) of the world's land forces, the Army could defeat 80 percent (103 countries), and the combined U.S. land forces could defeat 117 countries, or some 90 percent of all potential adversaries, without even resorting to Naval or Air Forces!

Furthermore, the combat power represented by the sheer numbers of U.S. ships and aircraft indicated that the Navy and Air Force alone could overwhelm virtually all nations at a ratio of at least 9 to 1, with the exception of China and Russia. Consequently, the combination of America's land, sea, and air combat power, even considering scheduled reductions, would theoretically enable the combined U.S. Armed Forces to easily defeat any known or projected threat.

In other words, the Army can reasonably be re-stationed, down-sized, and re-focused, primarily on the fundamental purpose of the Armed Forces, defense of the homeland—CONUS; this is already happening to some degree. That done, the Marine Corps, as a tested and proven rapid–deployment force, is highly trained and organized to operate from Naval vessels without relying on overseas bases to support United Nations/North Atlantic Treaty Organization peacekeeping missions. With two–thirds of the world's Marine forces, the Marine Corps is powerful enough to fight two lesser regional conflicts, when reinforced by the Navy and operating to support the Air Force. Protracted conflicts in Third World "shatterbelts" are not foreseen, but the offense–oriented Marine Corps could be reinforced by defense–oriented Army "armored" brigades, or act to support an Army warfighting corps. Also the proposed reorganization and restructuring along traditional precedents, based

on the redefined roles and missions above, would yield further efficiencies and increased combat power by greatly reducing personnel, logistical and funding burdens, and more readily support the regional defense strategy as outlined in the National Military Strategy.

Furthermore, these measures are made viable now because technology is enhancing the commander's ability to see, assess, and control the battlefield through electronic eyes and ears. Of course, consequent also is the fact that operational tempo has increased geometrically from an infantry march to the speed of a main battle tank, to the velocity of aircraft; while operations continue nonstop, around the clock, and through adverse weather. This process has driven the "fog of war" deeper into the conscious mind of the commander. It has greatly increased the potential for a cataclysmic error in judgment, based on either electronic or human failure.

Therefore, the Army can and must relook and rethink the archaic basic structure of the 11–man infantry squad, the necessary components of a maneuver battalion, and the structure of major warfighting elements—the division, corps, and theater Army. Simplification of ground force maneuver elements, permanent "cross-attachment" and practical standardization would reduce the potential for confusion, acrimony, competition, friendly fire, and combat friction by recognizing GEN Clausewitz's dictum that—in War the simplest things become difficult.

For many of these reasons, the Air Force recently restructured itself into composite wings to more closely align its organization with its mission, doctrine, and resources.

America's Air Force

"I can understand why we have an Air Force...
I can understand why our Army needs an Air Force...
I can understand why our Navy needs an Air Force...
But, I can't understand why our Navy's Army...
needs an Air Force!"

With that riddle in mind—as far as the emergent pre–eminence of the Air Forces of America and their gradual consolidation (however reluctant), the combination is both an evolutionary and revolutionary phenomenon. Much of current doctrine still refers to the combined arms team as infantry, armor, and artillery; however, the reality is that combined arms actually includes AD, engineer, aviation, naval, and air force and strategic nuclear elements (see fig. 3).

Nonetheless, the senior Army leadership frequently utters sophomoric, erroneous, and auto-didactic pronouncements, such as: *"airpower has never won a war"..."airpower isn't decisive"..."only ground troops can win wars"..."all wars, even modern wars, are settled on the ground"..."airpower didn't win WWII"..."we lost Vietnam—despite overwhelming airpower"... "North Vietnam won with ground troops, without airpower."*

In reality, technology and lethality have re–oriented "holding" ground to "controlling" ground, enabling commanders to "destroy" or "deny" objectives, more readily than to "take" or "occupy" fixed objectives, which are doomed to vertical attack by massed/precision fires. These factors drive ground troops to avoid detection and practice extensive dispersion

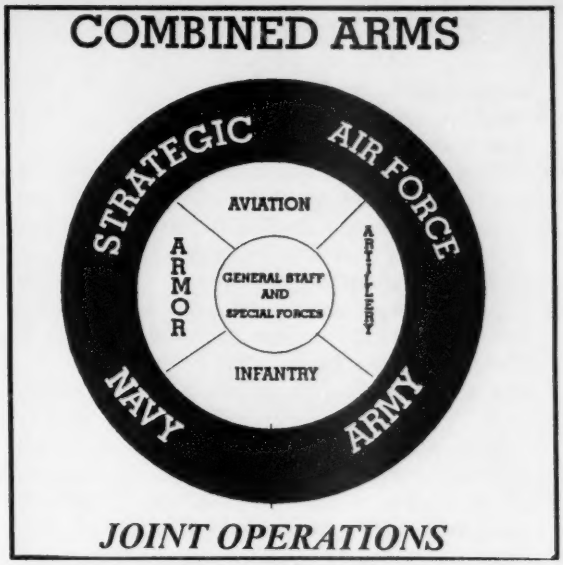


Figure 3. Actual Combined Arms Team

and deception to survive. That is what the VietCong and North Vietnamese Army (NVA) got right. That is what America's Army got wrong. And that is why airpower appears to have been irrelevant in Vietnam. America won the air war, but America lost the war on the ground! The VietCong and NVA remained elusive, while America's Army remained vulnerable. Today, it is fundamental to mass aerial/indirect/precision guided munitions (PGM) fires—not troops.

Despite the lingering mentality and myth that the "Infantry is the Queen of Battle" (read, ground troops), the peak of the airpower warfighting phenomenon has not been reached. And it may not even be in sight. In my mind, the zenith may result from the incorporation of the speed of the fighter–bomber with the flexibility of the helicopter, the armor of the tank, a hyper–velocity recoilless weapon, PGM/cruise missiles, and the onboard micro–computer. This nexus is imminent. It will happen when—the military technical revolution provides alternatives to the simple rotor blade for lift; laser weapons displace chemical and kinetic energy weapons; electronic defenses and composite materials replace steel armor; and battlespace management is completely integrated.

By any measure—given the current exchange ratios achieved in air–to–air combat, the capability of precision bombing, and the ability to kill armor—the dominant battlefield weapon system is the aircraft. The proof?

First, worldwide attack helicopter and joint air attack team simulation (and actual combat) exchange ratios against tanks are between 18 and 43 to 1, depending on terrain (Europe and Middle East scenarios, respectively). In other words, an 18–helicopter, attack battalion, could theoretically destroy between 324 to 774 tanks—a division or even a corps.

Second, in World War II (WWII), some 9,070 two–thousand–pound bombs were required to destroy one 60–by 100–foot target. In Korea and Vietnam, only 176 bombs were required. In the Gulf War, a conservative total of two

precision-guided bombs did the same job. In the near future, it is predicted that only one PGM will be required, despite adverse weather conditions.

Third, in WWII, the aircraft carrier also displaced the battleship as the pre–eminent surface combatant of the Navy. Consequently, modern naval warfare has evolved into the art of projecting airpower, offensively, and protecting capital ships from aircraft, defensively.

Fourth, joint service tactical doctrine and practice bears witness that ground forces immediately call for CAS in case of enemy contact and since WWII U.S. air superiority has obviated the need for tactical ground–to–air defense systems.

Finally, war–winning, strategic doctrine and practice since WWII witnesses the absolute reliance on establishing air supremacy, or at least superiority, before and during hostilities. Enough said. International trends follow and support these facts. During the recent past, nations have strengthened their armed forces as follows: 30 percent increased ships, 60 percent increased troops, 70 percent increased tanks, and 90 percent increased aircraft.

In short, our Air Forces have, in practice (if not in universal cognitive awareness), displaced Army and Marine ground forces as the principal maneuver arm in combat by dominating the battlefield. The other services support and complement our Air Forces' superior speed, economy, maneuverability, mass, shock-action, and firepower. Most flight officers know this. Most civilians, and troops, instinctively acknowledge it, even though they can't justify it.

One "Unified" General Staff

"We ought not to look back...unless it is to derive useful lessons...from dear bought experience..."

GEORGE WASHINGTON
GEN of the Armies, USA

Most importantly, the return to basic service roles and missions must rely on all of the appropriate elements of the winning WWII/Desert Storm strategy: the national decisionmaking process, including the Congress; historical precedent; and the Overwhelming Force Model. The combined effect would enable the services to continue their historical evolution in step with both the Military Technical Revolution and the New World Order.

This concept also would restructure the Armed Forces under a single "American General Staff" as originally actualized by GEN George Washington and re–envisioned by GENs Marshall and Eisenhower and CJCS David Jones. Naturally, there is some concern about creating an "Imperial" general staff or a monolithic, insular military that might be inclined to conduct a coup as described by Charles Dunlap in his fictional article, "The Origins of the American Military Coup of 2012." However, the triple–tier of decentralized federal Active and Reserve units, supplemented by State National Guard forces, guards against a military coup successfully encompassing CONUS.

Furthermore, in polling numerous line officers, their responses confirmed the reliance of the status quo on assumed traditions or facts that do not exist, or they reflexively rejected the single general staff model because "interservice rivalry would preclude its implementation," which again re–validates the need for change. Remarkably, the new model is established and operational in all of the services to some degree already. Witness the various branches of the Army under the direct supervision of a unified, branch–immaterial general officer corps.

In the same way, surface warfare or submariner admirals, at senior levels, often command task or unified forces of nuclear submarines, naval aviation, Marine or Army ground forces, and major elements of the Air Force. In fact, the same is true of all flag officers, joint staff officers, and the "top five percent" of the officer corps who attend sister–service academies or are cross–trained.

The dictum that "the easiest way around is the shortest distance through" could readily be applied to this situation. The President by Executive Order could cut the proverbial Gordian Knot by putting all American flag officers, along with the entire general staff and joint staff, in the same uniform, period. Jointness and unified would become a fact, instead of being mere buzzwords, hollow concepts, or elusive objectives rather than means. The single general staff would balance interservice rivalry from a positive point of view, while the negative effects of parity, redundancy, wasteful procurement, and maintenance practices, as well as combat inefficiency (and friendly fire casualties), would be more naturally avoided.

The resultant enhanced synergy of a single general staff would allow the "Armies of United States" to perform the fundamental functions of strategic defense, forward presence, and crisis response and reconstitution, at less cost and with greater confidence, well into the next century.

These recommendations would serve joint force integration, while focusing interservice roles and missions, thereby making interoperability easier for all nations. Finally, it would greatly reduce, or at least minimize, the interservice rivalry and fratricide, so manifest in America since the Spanish–American War.

In closing, an especially encouraging development is the appointment of Admiral William A. Owens as VCJCS. Admiral Owens appears to be an intellectual crusader of integrity and vision. Enjoying the support of CJCS GEN Shalikashvili, he is reputed to have fueled the "battle–of–the–services" recently by heading in the direction of a stronger JCS, less service and civilian secretariat authority, and commanders with "dominant battlefield awareness." AMEN.

"Proof that a divine Providence watches over the United States...we have managed to escape disaster even though our scrambled professional military ... has been an open invitation to catastrophe. The nation's safety must have a more solid foundation.

President HARRY S. TRUMAN

Captain, FA, USNG

Success Through Partnership

Major General John S. Cowings, Commanding General
U.S. Army Aviation and Troop Command
St. Louis, Missouri

"Success Through Partnership"—the battle cry of the Joint Aeronautical Commanders Group (JACG)—has served well in the past, and will continue as the group's guiding purpose.

As the JACG continues moving toward the turn of the century, the emphasis on partnership and initiatives will take on added importance because of the fiscal need for consolidation in the four aeronautics areas of acquisition, research and development, training, and maintenance.

The JACG, which meets quarterly, was formed and chartered under the auspices of the Joint Logistics Commanders in June 1985. The "jointness" is derived from the group's makeup. Its members come from all the services plus the U.S. National Aeronautics and Space Administration and the Federal Aviation Administration. The "partnership" philosophy affords commonality and interoperability, while permitting each service and aviation agency to retain its uniqueness.

The JACG implements this partnership by focusing on four action strategies: acquisition, engineering development, business process, and logistics.

Acquisition is the responsibility of the **Joint Program Opportunities Board**. The board identifies and implements processes to promote acquisition based on uniformity of standards and specifications, while tracking initiatives for "munitions interoperability." The board also directs the screening of mission need statements and operational requirement documents, as well as evaluating subsystem programs and conducting quarterly reviews on subgroup activities. This goal also encourages and tracts the use of commercial specifications.

Joint engineering development falls under the **Aviation Engineering Board**, which was formed to standardize engineering processes and to develop common specifications to present a "single–service face" to industry. The goal of this strategy is "best value" engineering. The board's objectives are numerous and include investigating the potential application of the Army Air Warrior initiative and the deletion or replacement of Operation Desert Storm requirements in specifications and technical manuals.

In addition, this strategy includes developing policy on advanced open architecture avionics, common specifications for aircraft structures, tri–service general engine specification, qualifications requirements for spares vendors, and specifications for munitions stores interoperability.

The **Aviation Engineering Board** oversees business strategy to identify common practices and removing practices that are obstacles to joint opportunities. This strategy seeks to standardize business procedures, by working with industry, to improve the sharing of information between federal agencies and commercial firms. The board also develops common warranties, standardizes contracting procedures and formats, and streamlines procurements to increase the commercial buying of weapons systems.

The **Aviation Logistics Board** identifies and develops improvements in depot support, acquisition, and the management of logistics support services. This strategy has five goals each with a distinctive set of objectives.

Working toward the **first** goal of improving depot repair and support, the board implements common maintenance processes by forming joint evaluation teams to develop plans for maintenance program specifications and the standardization of shop manuals for all service depots.

The board's **second** goal of optimizing depot inventory management centers on evaluating processes for DOD–wide implementation as well as developing an interservice pricing/credit policy.

The **third** goal for the Board involves standardizing integrated logistics support (ILS) processes by recommending model and data bases for ILS processes, and a single software system for all DOD activities. In addition, the board includes the development of a model for "performance–based" logistics specifications to be used by all acquisition managers. The board also seeks to adopt standard acquisition logistics terms, develop guidance on post-production support planning, and identify processes to assure that the services make the greatest use of common support equipment.

The board's **fourth** goal is to reduce the number of service training schools and courses by evaluating service component training tracks for all aviation maintenance schools. The board identifies common course curriculum and works to reduce or eliminate the unnecessary development of maintenance courses for similar systems.

The board's **fifth** and final goal—developing common approaches, processes, and tools for integrated maintenance and diagnostics—depends on identifying how project efforts can be combined in such areas as advanced diagnostics, integrated maintenance, research and development, prototyping, and implementation efforts.

All told, the goals of this JACG Board work together, unifying the services to eliminate duplication in research and development, training, evaluation, and acquisition. The returns on the investments made by the JACG have benefitted all the services as measured in terms of streamlining and efficiency.

"It's a super program," said Thomas House, director, Aviation Research, Development, and Engineering Center. "It's a great way to get multiservice solutions to a wide variety of aircraft–related problems."

For example, the JACG's '**Team Hawk**,'—dedicated to establishing commonality of parts, publications, contract procedures, testing and engineering change proposals—has worked continuously to improve the H–60 helicopter airframes and T–700 engines.

Also, the JACG has sponsored the joint–service Helicopter Air Bag Crash Protection System Program.

Controlling the proliferation of aviation batteries is another success of the JACG. This success was accomplished through the use of standardized checkpoints for item managers filling supply requisitions for batteries.

Another JACG project includes co–sponsoring, with the Joint Ordnance Commander's Group, an aviation munitions interoperability specification and handbook that will establish guidance to develop interoperable weapons for our future weapons systems.

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1994
LTG ELLIS D. PARKER AWARD WINNERS

OVERALL WINNER

2d Battalion, 1st Aviation Regiment
Ansbach, Germany
Combat

RUNNERS UP
(Winners in their category)

4th Battalion, 228th Aviation Regiment
Soto Cano Airbase, Honduras
Combat Support

6th Battalion, 101st Aviation Regiment
Fort Campbell, Kentucky
Combat Service Support

Eastern Army National Guard
Aviation Training Site,
Fort Indiantown Gap, Pennsylvania
Table of Distribution and Allowances

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